# **Original Research Article**

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# Perceived academic concerns of under graduate medical students: a study of student's perspective

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#### **ABSTRACT**

**Background:** With the drastic increase in the number of under graduate medical seats in India, the quality of medical education is facing challenges. To address these issues, curricular reforms have been advocated. Medical students are one of the stakeholders and their perceptions regarding medical education system hold a lot of importance.

**Methods:** This study was conducted by the department of community medicine of a premier medical institute of Delhi and involved analysis of 457 feedback forms filled by medical students about their academic concerns and their perceptions about ways to address these concerns. The responses were kept anonymous. They were read several times and were grouped to deduce meaningful information in order to reach an overall understanding.

**Results:** The medical students were concerned about the lengthy curriculum, long duration of lectures, language barrier and inappropriate assessment methods used. Lack of proper time management and recreational facilities were also pointed out. To address these concerns, they suggested some modifications in teaching and assessment methods like shorter and more interactive lectures, more focus on small group interactive teaching, healthier and friendlier teacher-student relationship and less frequent and skill-based assessment.

**Conclusions:** The concerns and suggestions made by students are important and valid. Most of these issues have already been taken up in latest modifications in medical education by Medical Council of India. The competency based medical education program which has been implemented recently has called for major reforms, which are also the felt needs of medical students.

**Keywords:** Academic concerns, Medical students, Perspective

## **INTRODUCTION**

There has been a drastic increase in the number of under graduate medical seats in India in the past few years, but the quality of medical education is facing challenges. A number of issues confront undergraduate medical education in India, which is one of the world's largest medical education systems. They include curriculum reform, proliferation of new medical schools, accreditation standards for all medical schools, selection of medical students, and faculty development. The major concern is to ensure maintenance of quality and standardization of medical education across a large, culturally diverse population, separated by geographical boundaries, and compounded by the paucity of formal training of medical

teachers in the principles of higher education and technology. Curricular reforms have been advocated for over many years, to orient the medical curriculum to the needs of the community.<sup>2</sup>

Medical students are one of the stakeholders and their perceptions regarding medical education system hold a lot of importance. They are also best suited to give their suggestions, based on their own perspective, about the ways to address their concerns. Based on their feedback, we can get an overview regarding improvement of our medical education program. There is a paucity of research focused on students' perspective on this issue and exploring their academic concerns. Hence, keeping in view these points, the present study was planned and executed.

#### **METHODS**

This study was conducted by the department of community medicine of a premier medical institute of New Delhi. The department coordinates the internship training of medical students. The students who pass their final professional examinations and are about to start their compulsory internship are routinely invited to give a feedback about their academic concerns and their perceptions about ways to address these concerns so as to make medical education more student friendly. We analyzed 457 feedback forms filled by the students of three consecutive batches.

#### Study tool

The feedback form contained open ended questions regarding the academic concerns felt by the students during all the professionals. They were asked about the problems they have faced in relation to academics and their suggestions about what should be done to overcome these problems. The concerns of students regarding factors related to the institute and teaching methods as well as those related to their personal lifestyle which they feel have affected their academic learning were explored.

The students were informed that their participation is completely voluntary and they can opt out if they feel so. They were then given the feedback form which was self-administered and filled anonymously. One student representative from each batch was responsible for collecting the filled forms and handing them over to one of the investigators.

#### Data analysis

The participants had filled the responses in the questionnaire in one or more sentences. Their responses were in their own verbatim which was read several times and categorized into more technically appropriate terminology. They were later on grouped to deduce meaningful information in order to reach an overall understanding.

#### Ethical issues

All the data were kept completely anonymous with no personal identifier. The confidentiality was strictly maintained. As this study involved retrospective analysis of anonymous data, the permission to do so was obtained from the Institutional Ethics Committee along with a waiver of written consent. So, the study protocol had a formal approval from the Institutional Ethics Committee.

#### **RESULTS**

The study questionnaire was distributed to 502 students, out of which complete responses were obtained from 457 participants who were included in the final data analysis. Thus, the response rate came out to be 90.9%.

Table 1 shows the academic concerns faced by the study participants. They were grouped into three main categories: related to curriculum, related to teaching and related to assessment.

Almost half of the participants (44.9%) had the concerns related to the medical curriculum. They were of the opinion that the curriculum is very lengthy and it is almost impossible to be knowledgeable about each and every aspect of it. One of the students stated the following: "We are expected to know everything under the sky which is impossible."

Also, they were worried that institute timings are too long which makes them exhausted.

Approximately two third respondents (65.2%) said that they find it difficult to obtain guidance from teachers because they have a fear to approach them. Almost a similar proportion of students (62.8%) also mentioned that theory classes are too long without a break in between which makes them loose interest and become less focused. A student mentioned: "Theory classes are very long and back to back without any break even for having breakfast."

Some of the students also said that because of difficulty in understanding English language, they are not able to grasp many things taught in lectures, which are almost exclusively taken in English.

Roughly one fifth participants (20.5%) said that they feel stressed because of very frequent tests. Approximately similar proportion (18.8%) stated that they feel there is a lot of focus on marks obtained in exams as well as on attendance in classrooms rather than learning. One of the respondents mentioned: "Too many tests reduced my will to learn new things. I studied only for exams."

The study subjects were asked about their personal factors related to study environment which were favourable as well as those that were unfavourable for academics.

A majority of participants mentioned that academically oriented environment of the institute motivated them to study hard. As one of the students has stated: "I feel motivated to study when I see others around me studying really hard. My teachers, seniors and batch mates, all are very concerned about academics." Another factor was group study with friends, which they agreed is more helpful in understanding the concepts and retention of facts as compared to studying alone. They also stated that support provided by their parents and family members really helped them to remain focused on studies.

Among the unfavourable factors, they have mentioned the lack of proper time management. Many of them were of the opinion that they wasted a lot of time in gossiping, hanging out with friends and excessive use of social networking sites, which could have better been utilized for academic purposes. Some students also highlighted that

the lack of access to recreational facilities made their lifestyle monotonous and decreased the will to study hard. "Sometimes, I felt fed up of just attending classes and studying books and would end up spending hours on Facebook and Instagram." For those staying in hostels, disturbances created by roommates and lack of a supportive family were also pointed out as hindrances for studying properly. While many of those who were day scholars mentioned that they lost a lot of time and energy in travelling daily to the college and back home which adversely affected their academics. Also, many a times, they could not access the institutional library and reading room after institute timings because they were not comfortable reaching home late in the evening or night.

The students were asked about their suggestions about the measures which should be taken to address the academic issues experienced by them. Most of them suggested for modifications in the teaching learning methods. They stated that the theory lectures should not be more than 45 minutes and there should be a short break between two lectures. They also emphasized the need for more interactive lectures rather than one-way teaching. Some of the participants mentioned that teachers should use diverse audio-visual aids for lectures like showing videos, chalk and board etc rather than just using power point presentations. One of them stated: "Just reading the slides from PPT makes the lectures boring and monotonous."

The respondents mentioned that because of very large number of students in lectures, those sitting on back

Lack of guidance from teachers because of fear to approach

A lot of focus on marks obtained in exams and attendance

Language barrier

Related to assessment

benches feel neglected. Hence, theory lectures should also be taken in two or more groups.

A few students said that teachers should use Hindi, which is their native language along with English in class so that they are able to comprehend things better. As far as practical sessions are concerned, the students pressed upon the need for more group discussions which according to them help in making the concepts clearer. They also said that practical sessions should focus more on skill-based learning. "More focus should be on leaning the aspects which are actually required in practice". The study subjects have stated that teacher-student relationship should be friendlier in nature so that the students feel free to ask about their doubts and interact with the teachers.

We also received suggestions to make changes in assessment process. Many students were in the favour of skill-based assessment. They mentioned that they should be assessed about the skills they are supposed to learn rather than how much they are able to recall from the books.

Some of them also suggested that tests should be taken less frequently because they create a lot of stress and ultimately hinder the process of learning. The participants mentioned that they should be taught system wise rather than subject wise. They also stated the need to have more focus on extracurricular activities in the medical colleges which ultimately will have a positive impact on curricular activities as well.

21 (4.6)

298 (65.2)

86 (18.8)

Academic concerns

Related to curriculum

Very long college timings/very lengthy curriculum

Related to teaching

Very long theory classes without break

Number (%)

210 (45.9)

Related to teaching

Table 1: Academic problems faced by medical students (n=457).

Table 2: Personal factors related to study environment of the students.

Favorable for study	Not favorable for study
	More wastage of time in gossiping with friends and excessive
Academically oriented environment	use of social media
	Lack of recreational facilities
	Students staying at hostel
Group study with friends	- Disturbances created by roommates in hostel
	- Lack of family support
	Students staying at home
Support by parents and family	- A lot of time and energy lost in travelling daily
	- Poor access to institutional library

Table 3: Students' suggestions on ways to address these concerns.

## Suggestions related to teaching methods

#### Theory classes

More interactive lectures

Better use of audio-visual aids

Lectures to be shorter duration (<45 min) with frequents breaks

Theory lectures should be taken in smaller groups

Bilingual teaching for better comprehension

#### **Practical teaching**

Skill based teaching

More focus on group discussions

### **Teaching style**

Better/more friendly teacher student relationship

Suggestions related to assessment methods

Less frequent tests

Skill based assessment

#### Other suggestions

Integrated teaching should be used

More focus on extracurricular activities in medical colleges

#### **DISCUSSION**

The present study explored about the academic concerns of under graduate medical students. We found that the students felt burdened by the vast curriculum and it is in accordance with other studies. Sarkar et al have reported in their study from south India that students consider medical education to be excessively stressful and feel that the course syllabus should be reduced.<sup>3</sup> Similarly, another research from African medical university also shows that the students perceived the course to be too stressful for them to enjoy it.<sup>4</sup>

The students also showed concern about teacher student relationship in medical institutes as well as long duration of lectures. These findings are consistent with those reported by Govender et al, who have mentioned that students perceived their teachers to be too authoritarian and teaching is perceived to be teacher centered.<sup>4</sup> In the current climate of curriculum reform, the traditional lecture has come under fire for its perceived lack of effectiveness. Studies have shown that there is a decline in students' attention after 10-15 min into lectures.<sup>5</sup> Thus, it is really difficult for the students to be attentive during lectures lasting up to one hour.

The students felt that there is a need to modify the assessment methods. Other authors have also reported that students perceive that current medical education encourages superficial learning and remembering of facts rather than deeper leaning with understanding and application of knowledge.<sup>4</sup>

The respondents mentioned that favourable factors about study environment motivated them to study hard. It is a known fact that the educational environment influences how, why and what students learn. They also stated some unfavourable factors as well. Similar issues for students have been highlighted by other studies.<sup>3,4,6,7</sup>

The students suggested the measures which they perceived would address the academic issues experienced by them. They were in favour of shorter theory lectures. The authors are of the opinion that the study participants have made a very valid point. Lengthy lectures serve no purpose if the learner is not attentive and able to grasp what is being taught. Researchers have reported that student concentration during a lecture rise initially to reach a maximum in 10-15 min, and fall steadily thereafter.<sup>5</sup>

The students emphasized the need for more interactive lectures. The traditional one-way lecture is now known to be poorly effective in learning. Making it interactive also makes it more interesting and less monotonous for the students. This is very difficult to achieve in a large group of 200 or more students, which is now the strength of students in an undergraduate medical batch at many medical institutes in India. Hence, the students' suggestion for taking lectures in smaller groups seems justifiable. Some of the teachers may feel it difficult to complete the topic in shorter duration and with more interaction during the lecture. Their concerns need to be taken care of by training them in non-traditional teaching-leaning methods like flipped classroom, which is a pedagogical approach in which basic concepts are provided to students for pre-class learning so that class time can be used to build upon those basic concepts.<sup>8</sup> Under competency based medical education program, there is a focus on shifting from a teacher centered approach to a learner centered approach and to achieve this, traditional didactic teaching has to be replaced by interactive teaching in smaller groups.<sup>9</sup>

Another suggestion regarding practical sessions was to include more of group discussions and to make these sessions more skill based. Research has demonstrated that group discussion promotes greater synthesis and retention of subject rather than traditional didactic methods. <sup>10</sup> Annamalai et al in their research work on group discussions in medical education, have found that the small group discussion bridged the gap between the teacher and student other than improving the student's communication skills. <sup>11</sup> These are also recommended by MCI. <sup>12</sup>

Student teacher relationship holds a central position in medical education and is critical for achieving favourable learning outcomes.<sup>13</sup> Our study subjects stressed upon to make student-teacher relationship friendlier to ensure more free interaction. Other researchers have also stated that supportive and caring relationship with teachers motivated the students and enhanced their learning.<sup>14</sup> Students learn best when they feel safe in learning environment. Teaching by humiliation is not conducive to learning.<sup>9</sup>

Assessment drives learning. What and how students learn depend largely on how they think they will be assessed.<sup>15</sup>

The findings of present study suggest that the participants wanted their assessment to be more skill based. If the students feel that they will be assessed about the factual knowledge only, they will focus on it rather than learning the skills, which will not lead to the achievement of required competencies. Newer performance-based assessment methods such as the Objective structured clinical examinations (OSCEs) are reliable and valid measure of a student's performance. Similarly, multisource or 360 assessments, case-based discussions, portfoliobased assessment and mini clinical evaluation exercise are some other newer methods which can be used for skillbased assessment. There is a need to train the examiners in using these methods.<sup>16</sup> Medical schools must focus their assessment on assessing all three learning domains, through problem solving, development of core competencies, adopt multiple methods of assessment and provide formative feedback.<sup>17</sup>

Some of the respondents suggested reducing the frequency of tests in order to facilitate learning. Preston et al have studied the students' perception about their assessment and have found that the students felt it would be good to keep examination load low as less pressure gives them time to consolidate knowledge and prepare for professional practice. They have also mentioned that assessment becomes a 'waste of time' and 'excessive' in the later years of course. Similar findings have also been reported by other authors. This issue can also be addressed by using a mix of different methods of assessment and familiarize the students with these so that they do not perceive them as a burden.

To highlight the need for integrated teaching, the students said that they are taught different aspects of the same topic at different times and it becomes difficult to correlate the things. Subject based instruction may lead to lack of appreciation by the student of the interconnected nature of knowledge in the various subjects and their relevance to care. Therefore, for enhancing 'wholesomeness' of education in competency-based curriculum, alignment and integration of subjects is proposed.<sup>18</sup> The study participants stated that there should be more extracurricular activities in the medical colleges. We feel that this aspect is very important and often neglected in medical institutes, where whole focus lies on academics. Study of medicine is one of the most stressful courses and it not only leads to psychological distress among the medical students but also adversely impacts their learning capabilities.<sup>3</sup> Thus, it is important to have some extracurricular activities for medical students which will help in alleviating stress as well as physical and mental rejuvenation. Our findings are in accordance with other studies.<sup>3,4</sup>

#### **CONCLUSION**

The medical students were concerned about the lengthy curriculum, long duration of lectures, language barrier, inappropriate assessment methods and lack of proper time

management and recreational facilities. To address these concerns, they suggested some modifications in teaching and assessment methods like shorter and more interactive lectures, more focus on small group interactive teaching, healthier and friendlier teacher-student relationship and less frequent and skill-based assessment. They also stressed upon the need to focus on extracurricular and recreational activities in medical institutes. We found that all these concerns and suggestions are important and valid. Most of these issues have already been taken up in latest modifications in medical education by Medical Council of India. The competency based medical education program which has been implemented recently has called for major reforms, which are also the felt needs of medical students. We hope that these modifications will train the medical students to become the much needed and competent Indian medical graduate, as desired by these guidelines.

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