

Students Assessment of 1st MBBS Curriculum In Relation To Duration, Teaching Learning Methodologies and Evaluation Techniques

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Abstracts: Background: Medical education has become dynamic and challenging. But teaching time has remained the same, In fact it is reduced to one year for I M.B.B.S. Though the curriculum is meant for I MBBS students, they were never involved directly in planning the curriculum and assessment methods. So this study is an effort to throw some light on what students feel about the current scenario. Materials and Method: Input from 200 I MBBS students were collected by using a questionnaire comprising of questions relating to the curriculum, teaching methodology and assessment techniques in the Department of Physiology at B. J. Medical College, Pune. Results :50% students felt that the duration of I MBBS should be 10-12 months while 31% felt that it should remain same (8-10 months). Regarding most enjoyable way of learning 46% students said Practical's are most enjoyable way of learning followed by Lectures (30%).About the usefulness of various teaching aids, 71% students felt that PowerPoint presentations are most helpful for understanding the topic. Students strongly felt that one system should be taught by single teacher (78.5%).For clinical demonstration in physiology, 55% students think ratio of teacher to student should be 1:25. Regarding assessment, 70% students felt that it should be at the end of each system. As far as the mode of assessment is concerned, 53% students felt that short answer questions are the most effective way of theory assessment Conclusion :Planning about the duration of course, teaching methodology and assessment techniques can be revised taking into consideration the student's opinion. [Joshi H et al NJIRM 2012; 3(3) : 128-132]

Key words: Teaching learning methods, evaluation techniques, I M.B.B.S. duration

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Introduction: The aim of medical education is to bring about behavioural change in medical students in terms of acquisition of medical knowledge, acquisition of professional skills and development of appropriate and enlightened attitude. It has always been emphasised that all these three aspects are equally important. And the medical curriculum is designed to achieve this aim.

The undergraduate medical curriculum in India is oriented towards training students to undertake the responsibilities of a physician of first contact who is looking after the preventive, promotive, curative and rehabilitative aspects of medicine. But it has been observed that planning of the curriculum, its review and evaluation is usually done by the senior faculty members of the institute and by the members of Medical Council of India. ^[1] The students who are learning this are usually never involved in the planning or revision of the curriculum.

At the same time, the medical profession is becoming increasingly dynamic and demanding. Teachers in addition to teaching undergraduate

and postgraduate teaching are also burdened with number of responsibilities such as patient care, research, administrative work and updating their knowledge. Also with the tremendous technical advancement, there is knowledge explosion, but teaching time has remained the same. To add to this burden, teaching time has further been reduced from 18 months to 12 months for preclinical subjects by the Medical Council of India.

This has made the medical teacher's job challenging and since the medical profession deals with human life, teachers have the responsibility of producing doctors with adequate training. So in order to overcome these difficulties and to have an effective teaching, a medical teacher should have thorough acquaintance with various teaching learning methods, their merits and demerits, so that they can adopt suitable methods to optimise learning outcome.

To know whether the medical students are capable for taking care of patients and society periodical evaluation should be carried out.

Evaluation is the process of determining whether pre determined educational objectives have been achieved. In fact, since the time; Dronacharya conducted an examination of Pandavas to assess, whether the education he gave had brought about the necessary changes in them to become effective archers, evaluation has been an integral part of education. The primary purpose of evaluation is to determine how much and how well students have learned and it is feedback to both students and teachers. It is of great help in detection of learning difficulties which can be corrected by modifying learning methods or activities. In order to be meaningful tests which are part of evaluation should be frequent, covers small contents, areas and it should give immediate feedback to the students.

Finally the most important characteristics of evaluation tools are it should be relevant, valid, reliable and feasible. In this study, we assessed the duration of I MBBS, various teaching learning and evaluation methods which are used by teachers of Physiology department at BJMC, Pune.

Objectives : To assess I MBBS students perception regarding

1. Duration of I MBBS course.
2. Usefulness of various teaching learning media.
3. Current evaluation techniques.

Material and Methods: The study was approved by the Institutional Ethics Committee. After obtaining a written informed consent, Input from 200 I MBBS students were collected by using a specially designed questionnaire comprising of points relating to the curriculum, teaching methodology and evaluation techniques in institute at B. J. Medical College, Pune, Maharashtra, India.

The students were given questionnaire and asked to respond freely and fearlessly. They were informed that their identity will not be revealed and the information furnished by them

is for the research and evaluation purpose only and will be confidential.

The faculty participation while filling up the questionnaire by the students was strictly avoided to get a fair opinion of the students and to avoid bias. The questions in the questionnaire were explained and students were asked whether they have any difficulties. They were given 20 minutes to answer the questionnaire.

The questionnaire was collected back from the students and analysis was done considering each question of the questionnaire and using Microsoft excel sheet.

Result: Out of 200 medical students, the mean age was found to be 19.4 years. In gender distribution male students (61%) were higher than female students (39%).

When they were asked about the duration of I MBBS course, 50% students said it should be 10-12 months while 31% said it should be 8-10 months and 19% said it should be 12-14 months About various teaching learning methodologies in Physiology, 46% students said Practicals are most enjoyable way of learning followed by Lectures (30%) and then Lecture cum demonstration (24%)

Regarding the teaching methods 71% felt that Powerpoint presentations are most helpful for understanding the topic followed by chalk and board (19%) and overhead projector (10%) Students strongly felt that one system should be taught by single teacher (78.5%) as compared to it should be taught by more than one teacher(1.5%). 20% felt that this does not matter whether the particular system should be taught by single teacher or by multiple teacher. For clinical demonstration in physiology, they felt the ratio of teacher to student should be 1:10 (42%), 1:25(55%) and 1: 50 (3%).

Regarding assessment, 70% students felt that assessment should be more frequent and it should be at the end of each system, while

29.5% felt that it should be at the end of each term and only 0.5% felt that it should be on weekly basis.

And finally about the way of assessment, short answer questions(SAQ) are the most effective way of theory assessment (53%) followed by MCQ (41%) followed by (LAQ) long answer question (6%).

Table1: Perception of students in percentage

Duration of I M.B.B.S.	8-10 Months 31%	10-12 Months 50%	12-14 Months 19%
Teaching Aids	Chalk & board 19%	LCD 71%	Overhead Projector 10%
Teaching one system	Single teacher 78.5%	More than One teacher 1.5%	Does not matter 20%
Teacher : Student ratio for Clinical Demonstration	1:10 42%	1 : 25 55%	1: 50 3%
Most enjoyable way of learning	Lectures 30%	Practicals 46%	Lecture cum Demonstration 24%
Periodic assessment	Weekly 0.5%	At the end of 1 system 70%	Term end 29.5%
Most effective way of Theory assessment	MCQ 41%	SAQ 53%	LAQ 6%

Discussion: In this study we tried to find out the perception of I MBBS students regarding the current MBBS curriculum and utility of current teaching learning media in understanding the subject by the students We also evaluated the current assessment system.

When students were asked about the duration of I MBBS course, 50% students said it should be 10-12 months i.e. it should be increased by 2-3 months, while 31% believed that it should be 8-10 months and 19% said it should be 12-14 months.

Similar study conducted by Nagar SK and Colleagues ^[1] found that the present curriculum of MBBS can be taught in 8-10 months duration. Majority of the students joining the MBBS course undergo a prior “spoon feeding” type of coaching by their parents and teachers. In the new unfamiliar environment of a medical college they are exposed to a totally new scenario of teaching/learning process. They develop problems like difficulty in studying and understanding of the heavy volumes of the pre-clinical subjects, problems related to adjusting and adapting to the new college and hostel life and odor of the dissection hall full of cadavers. As a result, learning becomes very unpleasant, leading to frustrations, corroding of the morale and self confidence of the students, with consequent poor performance in the first term examination disturbing even their mental equilibrium. So in order to avoid this I MBBS duration should be increased to 10-12 months from the present 8-10 months duration so that they will get enough time to get adjusted to new and unfamiliar environment and this will definitely help them to improve their performance.

About various teaching learning methodologies, 71% students felt that Powerpoint presentations are most helpful for understanding the topic followed by chalk and board (19%) and overhead projector (10 %). Similar study done at Kasturba Medical college, India showed that Mixed Aids (54.9%) is the best method of audiovisual aids to teach MBBS subjects followed by Powerpoint presentation (20.9%) and Blackboard and OHP are (19.6% and 4.9%) respectively.^[3] In another study it has shown that the best methods of teaching and learning methods are LCD slides (54.83%) followed by chalk and board methods (37%)^[4] . In another study analysis of various teaching methods showed Chalk and Board methodology to be the best (60%) followed by LCD Slides (20% students) and dictating notes (5%) was the least preferred teaching method.^[5] Though there are many teaching aids one must weigh the relevance of each in a particular

situation. Bad use of any teaching aids may unnecessarily obstruct effective learning. One must also be prepared to deliver the talk without the visual aid due to unenvisezed possibilities such as failure of projector or lack of electricity. A good teacher should also have a sufficient presence of mind to alter the whole exercise because they may have to go back to good old chalk and talk due to unavailability of visual aid. Finally one must remember that these teaching aids are devised to facilitate learning and supplement a teacher rather than replace him.

Then regarding the way of leaning 46% students said Practicals are the most enjoyable way of learning followed by Lectures (30%) and then Lecture cum demonstration (24%). This clearly indicates that two way interactive learning is much more enjoyable than one way monotonous lectures.^[6]

Students strongly felt that one system should be taught by single teacher (78.5%) as compared to it should be taught by more than one teacher (1.5%). 20% felt that this does not matter whether the particular system should be taught by single teacher or by multiple teacher. This clearly indicates that when a particular system is taught by a single teacher it results in smooth continuation of topic and avoid unnecessary repetitions.

For clinical demonstration in physiology students feel that the ratio of teacher to student should be 1:10 (42%), 1:25(55%) and 1: 50 (3%).

Regarding assessment, students feel that assessment should be more frequent and it should be at the end of each system (70%), while 29.5% feel that it should be at the end of term while only 0.5% feel that it should be weekly. According to them it will definitely help to boost their confidence. Similar results are shown by other authors.^[7,8]

Conclusion: In our opinion, the duration of M.B.B.S. course should be 10-12 months to avoid the brain drain. Majority of the students believed that Power point presentations are the most helpful for understanding the subject. Practical is the most enjoyable way of learning. Students strongly felt that one system should be taught by single teacher. As far as assessment is concern it should be more frequent i.e. at the end of each system and more emphasis should be given to SAQ. The study shows that planning about the duration of course; teaching methodology and assessment techniques can be revised taking into consideration the students' opinion. This will bring about a change in preconceived notions about teaching learning methodology and assessment methods.

References:

1. Nagar SK, Ojaswini M, Kubavat D, Prajapati V, Ganatra D, Rathwa A. Students perception on Anatomy teaching methodologies. National Journal Of Medical Research 2012;2(1):111-2.
2. Kothari ML, Mehta LA, Joglekar SS, Bhuiyan PS. The art of teaching medical students. 2nd ed. Medical education technology cell, Seth GSMC and KEM hospital, Mumbai;2000. P.111
3. Bhowmick K, Mukhopadhyay M, Chakraborty S, Sen PK, Chakraborty I. Assesment of perception of first professional MBBS students in India about the teaching learning activity in Biochemistry. South East Asian Journal Of Medical Education 2009;3(2):27-34.
4. Banerjee I, Jauhari AC, Bista D, Johorey AC, Roy B, Sathian B. Medical students view about integrated MBBS course: A questionnaire based cross sectional survey from a medical college of Kathmandu vally. Nepal Journal Of Epidemiology 2011;1(3):95-100.
5. Banerjee I, Jauhari CA, Johorey CA, Gyawali S, Saha A. Student's Accreditation of integrated Medical Education in Nepal.

- Asian Journal of Medical Sciences 2011;2 (1): 49-52.
6. Mohan L, Ravi Shankar P, Kamath A, Manish MS, Eesha BR. Students' Attitudes Towards the Use of Audio Visual Aids During Didactic Lectures in Pharmacology. Journal of Clinical and Diagnostic Research 2010;4:3363-8.
 7. Nazneen R, Talukder HK, Hossain MZ. Student's Opinion Towards the Assessment System of Revised Undergraduate Medical Curriculum - An Experience in A Private Medical College. J Bangladesh Coll Phys Surg 2010; 28: 151-6.
 8. Hammond A, Collins S, Booth J, Kalia S. Learning from evaluation : a descriptive, student formed approach. The Clinical Teacher 2009; 6(2):73-8