



Knowledge, Attitude and Practice (KAP) survey on the perception and approach of students to identify the gap in teaching and learning process in the 2nd year MBBS curriculum.

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Abstract

Background & Objectives: The most important necessity of educational system is to assess the usefulness and effectiveness of the teaching and learning process. The aim of this study was to evaluate the knowledge, attitude and practice among the 2nd professional MBBS students regarding the teaching and learning process being used.

Materials and Methods: The study was carried on a batch of 150 students in the 2nd professional 3rd semester MBBS students. A pre -designed and validated questionnaire, pertaining to the aspects of knowledge, attitude and practice towards the teaching and learning process, was used to assess the general perception and approach of students to identify the gap in teaching and learning process.

Conclusion: The teaching and learning through tutorials and practicals were more efficient due to greater interaction among students. There is a need to innovate new modes of teaching in order to enhance the performance of the students

Keywords: Knowledge, Attitude, Practice, Teaching, learning

Introduction

Medical education is important for the understanding among students in terms of knowledge, attitude and practice (1). Due to inception of modernization in education system, the pattern of teaching is facing a lot of challenges (2). In the growing and competitive world, stress for the studies and better performance are constantly increasing in our society and so are the needs of the students. Teaching methods are being reformulated every time keeping in mind the constant needs of the students. To meet the requirements of students, teachers needs to keep themselves rationalized with the ever-changing trend and recent advances (3). Although self-study is observed to be the best learning method for every student, but everyone unquestionably needs to be enlightened (1). It is customary that active learning is much more effective in comparison to passive receipt of instruction (4). Teachers are changing their methods of teaching for effective learning; using teaching-learning media and various demonstration tools. Teaching without learning is just talking, which makes no sense (5). Classroom learning should focus on observing and improving learning besides teaching. Teaching is an 'ever-changing' process and

needs to modernise continuously in accordance to the need of time (6).

The most important necessity of educational system is to assess the usefulness and effectiveness of the teaching and learning process (7). Learning of the basic concepts in the 2nd professional subjects is important as it serves as the foundation of the medical knowledge. Therefore, the aim of this study was to evaluate the knowledge, attitude and practice among the 2nd professional MBBS students regarding the teaching and learning process being used.

Material and methods

The study was carried out on a batch of 150 students in the 2nd professional 3rd semester MBBS students. A pre - designed and validated questionnaire pertaining to the aspects of knowledge, attitude and practice towards the teaching and learning process being used in the Department was circulated to all the students.

The 2nd professional 3rd semester MBBS batch, as per the Department protocol, are divided into two batches of 80 students each, after getting exposed to a one-hour lecture on the concerned topic. The batch of first half attends one hour practical while the other half attends the tutorial during the same period on the same topic. The same is reversed for the two batches in the next one hour.

The questionnaire was given to the whole class after the lecture and to both the batches at the end of practical and tutorial sessions respectively.

The questionnaire consisted of ten questions pertaining to the knowledge (5), attitude (3) and practice (2) towards the topics covered in the 2nd professional 3rd semester. In addition, there were five questions attributing to the preference of the students towards the teaching learning process. Students were asked to be unbiased while answering.

Each correct answer was awarded one mark, whereas wrong answer did not get any mark. At the end, the

compilation was done for the knowledge, attitude, practice and preference of the students.

Result:

Table 1: Feedback from the students towards preference for teaching learning process

	Teaching- learning methods			
	Lecture	Practical	Tutorial	Self - study
Percentage of students opting for various teaching learning methods	20.2%	39.8%	31.2%	8.8%

Table 1 shows that the maximum number of students preferred practical followed by tutorials. Students preferred lectures the least (20.2%), whereas, a few students preferred self- study over the other mode of teaching.

Table 2: Assessment of students for knowledge, attitude and practice towards teaching learning process

	Knowledge	Attitude	Practice
After Lecture	64.8%	65.8%	59%
After Tutorial	74.2%	64.2%	65%
After Practical	64%	66.1%	66.7%

Table 2 shows the assessment of knowledge, attitude and practice towards the lecture, tutorial and practical sessions. After tutorials, the knowledge score improved as compared to lecture and practical. Practice score marginally improved after practicals. Whereas, attitude score was comparable after all the three teaching learning methods.

Figure 1: Perception of students towards lecture

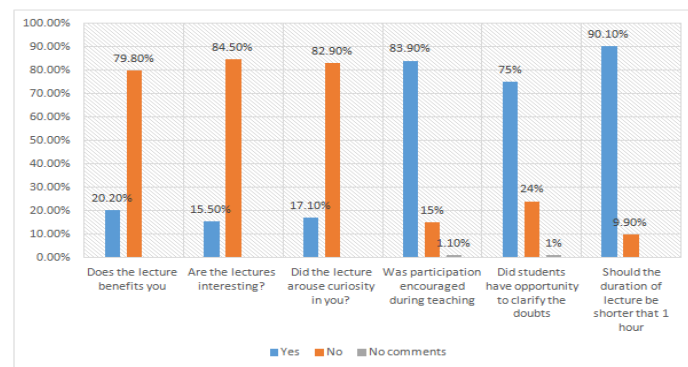


Figure 1 shows that majority of the students feel that lecture does not benefit them much, are not interesting and does not arouse curiosity in them. Whereas, most of them feels that they were encouraged to participate in the class, they were given opportunity to ask their doubts in the class. 90 % of the students feel that the duration of lectures be reduced.

Discussion

Assessment through feedback questionnaire have always been the most effective method to check the learning of students. It helps in the perfect evaluation of each student in the class as one cannot observe each student individually on daily basis in the class of 150 students. It not only evaluates students but also the teachers and helps them to teach in the more effective way. This further helps to identify the lacunae that exists in the education system and thus improving the teaching skills.

Most of the KAP surveys done among MBBS students have catered to the teaching- learning methods, whereas, the actual process of teaching through lectures, tutorials or practical have not been ventured into. It is essential to know whether the teaching process is predominantly teacher centric or student centric so as to improve the learning among the students. The study sought suggestions from students about their perception towards the teaching learning process in order to identify the gaps.

As seen in Table 1, only 20% of the students preferred lectures among all the methods of learning. This result was consistent with a study conducted in a medical college where perception of medical students was assessed for various teaching -learning methods, according which 11.2% students preferred lectures (8). In another study done on the evaluation for teacher-based or student-based teaching methods among medical students of a medical college in Iran, participants preferred lecture-based methods (9). Similarly, in a study on analysis for teaching and learning methods in a medical college in Andhra

Pradesh, 68% students preferred learning by lecture, whereas only 46% students found learning by student -centric approach extremely appropriate (10). This can be explained by the fact that in lecture-based method, the professor presents the complete content, in a more organized way in front of the students (9). Also the teacher can stress on the main points of the topic which otherwise the student can miss (10). Similarly, in a study which evaluated the teaching methods and their efficacy, conducted in a college in Meerut, 77.02% of students showed their preference for lecture as the most effective method of teaching followed by group discussion 68.02% and tutorial 58.94% (11). There was no improvement in knowledge component after the practical, which could be probably because of the fact that most of the theoretical discussions are done during the lecture and tutorial. But one implication and further suggestion that we can take from here is that the knowledge part of the practical aspect in the concerned topic should be dealt in detail during the practicals.

The average knowledge score after the lecture was 64.8%, which was improved to 74.2% after tutorial which indicates marginal improvement in the knowledge after one to one discussion, that remains a major limitation with a lecture. The time allotted, the syllabus to be covered or the strength of the class would largely determine how interactive a lecture could be. A study done to assess the perception of medical students about the teaching and learning methods showed that 15.3% of the students liked the tutorials as unlike 31.2 % in our study. Goyal et al. in a study also found that students preferred tutorials over discussion and their results were consistent with the results of Badyal et al (12,13). Nikfar et al. and Qin et al. in their study used the student based educational methods, which has shown to increase the students' interest and motivation (14,15). The class tests of any kind (MCQ in our study) develops critical thinking and communicational

skill and keeps the students' interest in learning. A similar study performed in govt. college in Meerut states that the 77% of students found lecture as the most effective method of teaching followed by group discussion 68.02%, tutorials 58.94% and seminars 49.05% (11). Tutorials are conducted among smaller batches of 20-25 students which allows one to one interaction among students and teachers and also removes any kind of apprehensions among students to clarify doubts. Also the teachers can keep a track on the performance of each student, so that time to time guidance can be given to the students.

We did not find significant difference in the attitude of the students toward the concerned topic after lecture (65.8 %) & after tutorial (64.2 %). However, there was a marginal increase in the attitude of the students towards the topic after practicals. Students probably learn the correct attitude better during the practical class when they are under the supervision of faculty and residents. There being a paucity of literature on the assessment of attitude of students after various teaching-learning processes, a comparison could not be done. Hence, our study is unique in a way that all the three components of knowledge, attitude and practice were assessed during the lecture, practical and tutorial.

The difference in the practice component was much more evident after tutorial or practical ,59% after a lecture as compared to 65% and 66.7 % after tutorial and practical respectively. Although in our study, 39.8 % of the students feel that the practicals are the best method of teaching, 8.8 % also preferred self-study. This could be because of the abundance of study material available everywhere on the internet which has reduced both the teachers' as well as students' efforts to refer to standard books for their notes. Teaching is only demonstrating that something is possible while doing something is making it possible for yourself. Hence, we feel that practicals by far the best means of

inculcating knowledge, attitude as well as practice into the students by direct demonstration.

Figure 1 shows that 90.1 % of our students wanted the duration of the lecture to be reduced. Though they were allowed to participate or clarify there doubts, which reflects the good quality of teaching, the long duration made the lecture monotonous and failed to arouse curiosity. This was consistent with a study done to assess the perception of students for teaching-learning process in a medical college where the students found it difficult to maintain the concentration during the one-hour long lecture. Studies have shown that an adult has the attention span of only 18-20 minutes (16.)

To know the needs of the students so as to overcome the gaps in the teaching and learning process, feedback from the students, especially in the form of KAP survey MCQ is the most effective way. Students feedback can help the teachers to use novel methods of teaching so as to make learning easy and effective. Student-centric approach should be incorporated in teaching as students have multiple alternatives elsewhere in today's time. In student-centered instructions, students and teachers equally interact to discuss the problems. Group work should be encouraged so that the students learn to communicate with one another. We have introduced "Student Seminars" as one method to improve teaching in our setting. Here, we give topics to students in small batches of around 15-20 students and we allot each group to a faculty. The faculty divides the topic into smaller subtopics and allots them to each student of the group. Each student prepares their respective given topics and the combined presentation of the group is done in front of the whole class. The whole process is moderated by the faculty who then assess each batch of students in the presentation. This method helps in active participation of the students in learning and also prepares them for future opportunities of presenting in front of a big audience.

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Question	Yes	No	No comments
Does the lecture benefits you	20.2%	79.8%	-
Are the lectures interesting?	15.5%	84.5%	-
Did the lecture arouse curiosity in you?	17.1%	82.9%	-
Was participation	83.9%	15%	1.1%

encouraged during teaching?			
Did students have opportunity to clarify the doubts	75%	24%	1%
How are the practical classes conducted?	Excellent 35.2% Average 7.5% Good (49.4%)		
Which session do u like the most	Lecture (20.2%)	Practical (39.8%)	Tutorial (31.2%)