



## Awareness and Sentience of new CBME curriculum by MCI among First year MBBS students of a Medical Institution in Northern Maharashtra

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### ABSTRACT

**Background:** The Medical Council of India (\*Now National Medical Commission) has changed the MBBS curriculum and rolled out new CBME curriculum for implementation from 2019 batch. The curriculum is divided into various competencies which students have to master. The new curriculum is student centric and has many new aspects of teaching like early clinical exposure, self-directed learning to name a few. This study was conducted in a Medical institution situated in Northern Maharashtra with the following objectives: **Objectives:** 1. To assess the knowledge and sentience of First MBBS students about the new CBME curriculum. 2. To evaluate the efficacy of teaching of the new CBME curriculum from First MBBS students point of view. **Methods:** To assess the knowledge and sentience of First MBBS students about the new CBME curriculum by the MCI, a questionnaire based observational cross sectional study was conducted in a private medical college in northern Maharashtra region. A pre-designed, pre-validated, structured questionnaire was filled by the first year MBBS students via Google Forms sent to them and the data, obtained and assembled from the Google forms in the form of responses, was evaluated, tabularized and

presented in the form of percentages. **Results:** In a significant amount of students, the awareness about the CBME curriculum was very satisfactory. The overall sentience among the students was very positive towards the beneficially of the CBME curriculum. **Conclusion:** We received a very fulfilling and promising feedback from the students about the new CBME curriculum and its effectiveness. This study will help additionally in revealing the choice of students and their point of view about the teaching-learning of new curriculum.

**Key Words:** Competency Based Medical Education, Early Clinical Exposure, Self-Directed Learning

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**Introduction:** With the aim of strengthening the Medical education, the Medical Council of India (\*Now National Medical Commission) introduced new Competency Based Medical Education curriculum for implementation in 2019, a long due change from the traditional curriculum which was going on for past 22 years. The new curriculum was given a befitting name because the whole curriculum was divided into competencies which were designed to achieve a desirable outcome from their framework.<sup>1,2</sup> The word competency means possession of sufficient knowledge or skills.<sup>3</sup> The CBME curriculum aims to deliver the MBBS students with the essential orientation and skills vital for proper patient care.<sup>1</sup> There are five broader competencies expected from an Indian Medical Graduate namely clinician, lifelong learner, communicator, leader & professional.<sup>4</sup>

Many new modalities of teaching-learning were introduced in the new CBME curriculum like Early Clinical Exposure, Self-Directed Learning, Skills module training, AETCOM, Foundation course to name a few.<sup>4</sup> ECE was introduced to incorporate clinical aspects in the basic sciences subjects. The SDL component was introduced to promote the self-learning attitude among the students and to make students lifelong learners. The AETCOM module was introduced to include attitudinal practices, ethics and communication skills as a part of routine MBBS curriculum. The foundation course was incorporated to make the first year students more comfortable to the new environment of the institute, to teach them regional languages for effective communication, to inculcate in them a habit of exercise.

The present study was undertaken to assess the awareness and sentience of the new curriculum among the First MBBS students and to evaluate the efficacy of teaching of the new curriculum according to student's perspective.

**Objectives:**

1. To assess the knowledge and sentience of First MBBS students about the new CBME curriculum.
2. To evaluate the efficacy of teaching of the new CBME curriculum from the First MBBS students point of view.

**Material and Methods**

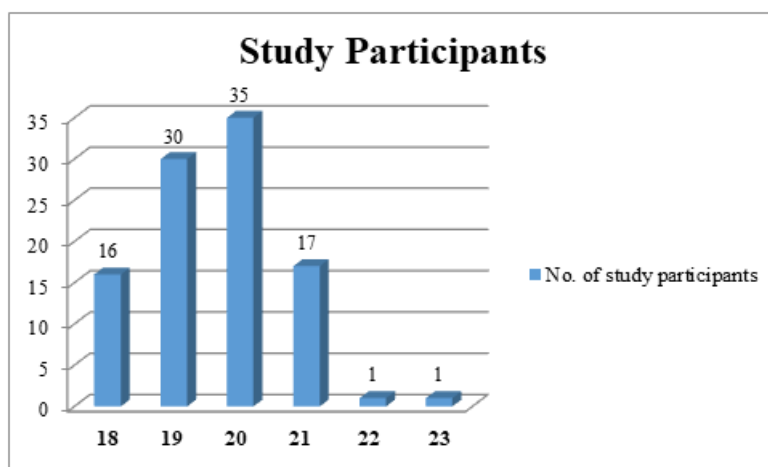
The present study was conducted in a tertiary care hospital in Northern Maharashtra region over a period of 1 month. A pre-validated, pre-designed structured questionnaire in the form of Google form link was shared with the students. Students were explained the purpose of the study and asked to fill up & submit the Google form.

**Selection of study participants-** Out of 150, 100 First year MBBS students filled and submitted the Google forms as responses. Those 100 participants were included in the study.

**Method of analysis-** Some of the responses to the questions asked were mostly of 5 points likert scale and some were in the form of yes/no type. These responses from the students were integrated, tabularised and presented graphically as received from the Google forms responses summary.

**Study Design:** Questionnaire based observational cross-sectional study

## Results



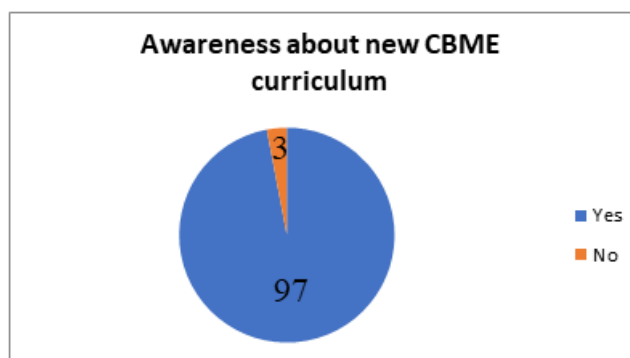
**Graph 1:** Distribution of study participants according to Age

Majority of the study participants were in the age group of 18 to 21 years with maximum participants being 20 years of age. (Graph 1)

**Table 1:** Distribution of study subjects according to sex

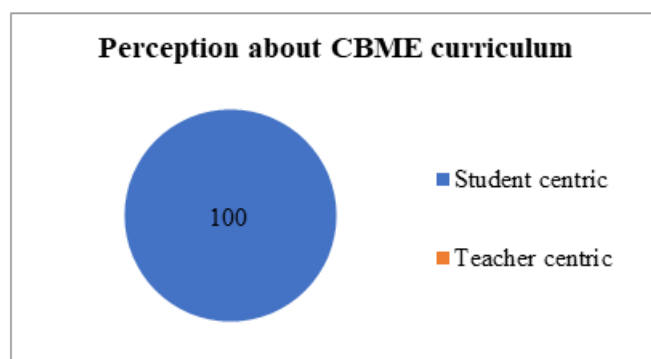
Sex	Study Participants
M	47
F	53
<b>Total</b>	<b>100</b>

Out of 100 participants, 53 participants were females and 47 participants were males. (Table 1)



**Graph 2:** Awareness about new CBME curriculum

In response to the first question on awareness about the new CBME curriculum implemented by the MCI, 97 % of the participants responded with affirmation that they are aware about it. (Graph 2)

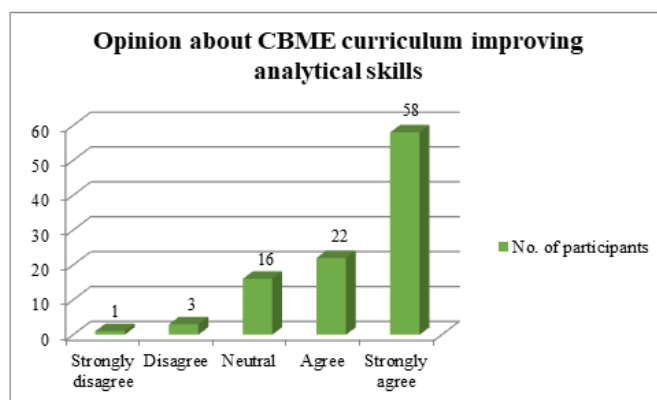


**Graph 3:** Perception of students about new CBME curriculum

When asked about their perception about the new CBME curriculum, 100 percent of participants answered that the new curriculum is student centric and not teacher centric. (Graph 3)

**Table 2:** Opinion about the CBME curriculum improving analytical skills

Opinion from study participants	No. of participants
Strongly disagree	1
Disagree	3
Neutral	16
Agree	22
Strongly agree	58

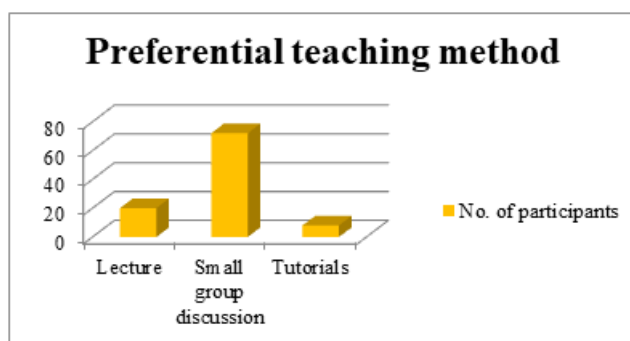


**Graph 4:** CBME curriculum improves analytical skills

When asked whether the new CBME curriculum has helped in improving the analytical skills in the first year subjects, out of 100 participants, 58 participants strongly agreed, 22 participants agreed, 16 participants gave a neutral opinion, 3 participants disagreed and one participant strongly disagreed. (Table 2, Graph 4)

**Table 3:** Preferential teaching method

Teaching Method	No. of participants
Lecture	20
Small group discussion	72
Tutorials	08

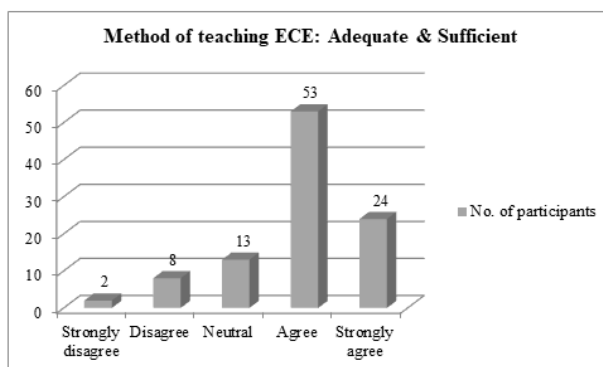


**Graph 5:** Preferential teaching method

Out of 100, 72 participants opined that they favour small group discussion as a preferred method of teaching-learning. 20 participants said that they prefer lectures and 08 participants said that they prefer tutorials as the most preferred method of teaching-learning. (Table 3, Graph 5)

**Table 4:** Method of teaching ECE: Adequate & sufficient

Opinion about teaching of ECE being adequate & sufficient	No. of participants
Strongly disagree	2
Disagree	8
Neutral	13
Agree	53
Strongly agree	24

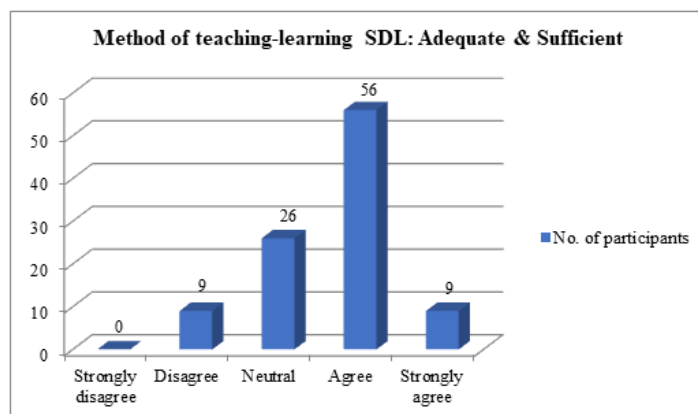


**Graph 6:** Method of teaching ECE: Adequate & sufficient

Out of 100, 24 participants strongly agreed that the method of teaching Early Clinical Exposure is adequate and sufficient. 53 participants agreed to the statement. 13 participants were neutral and 10 participants had disagreeing opinion. (Table 4, Graph 6)

**Table 5:** Method of teaching-learningSDL: Adequate & sufficient

Opinion about teaching-learning SDL being adequate & sufficient	No. of participants
Strongly disagree	00
Disagree	09
Neutral	26
Agree	56
Strongly agree	09

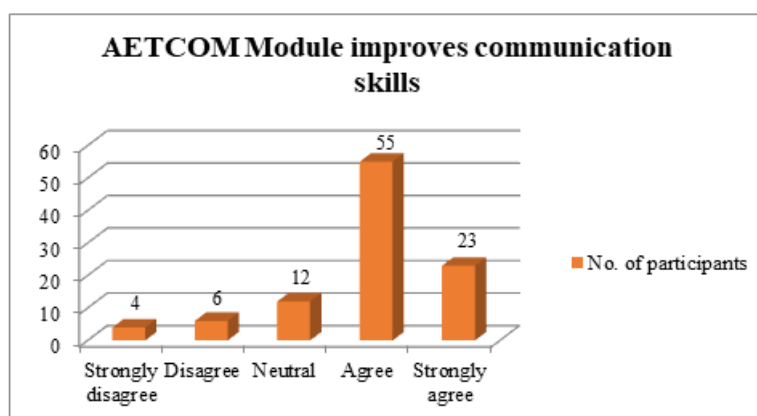


**Graph 7: Method of teaching-learning SDL: Adequate & sufficient**

Out of 100, 9 participants strongly agreed that the method of teaching-learning Self-Directed Learning is adequate and sufficient. 56 participants agreed to the statement. 26 participants were neutral and 9 participants had disagreeing opinion. (Table 5, Graph 7)

**Table 6: AETCOM Module improves communication skills**

Opinion about AETCOM Module improves communication skills	No. of participants
Strongly disagree	04
Disagree	06
Neutral	12
Agree	55
Strongly agree	23



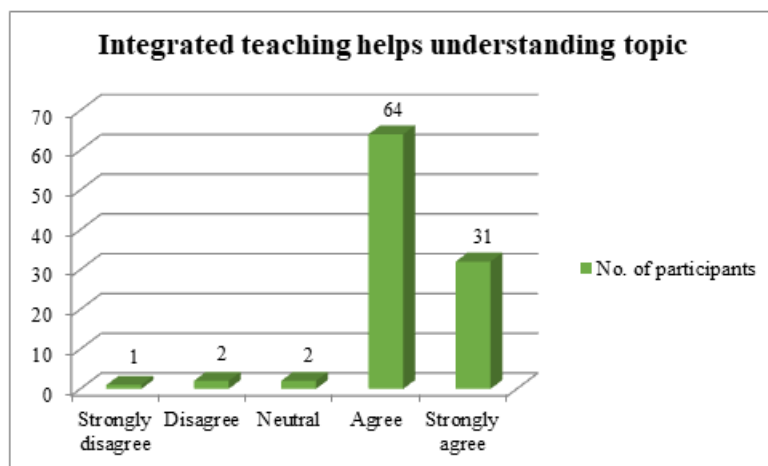
**Graph 8: AETCOM Module improves communication skills**

When the participants were asked whether teaching AETCOM Module during the first year helps to improve communication skills, 78 participants agreed in affirmation, 12 participants had a neutral opinion and 10 participants had a disagreeing opinion. (Table 6, Graph 8)

**Table 7: Integrated teaching helps understand topic better by incorporating clinical aspects**

Opinion about integrated teaching helps understand topic better by incorporating clinical aspects	No. of participants
Strongly disagree	01
Disagree	02
Neutral	02

Agree	64
Strongly agree	31

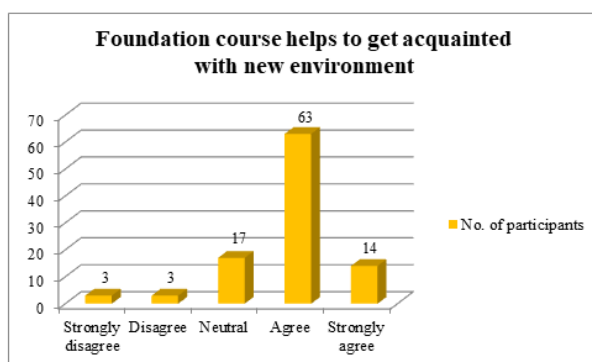


**Graph 9:** Integrated teaching helps understand topic better by incorporating clinical aspects

When the participants were asked their opinion on whether the integrated teaching helps to understand a topic better by incorporating the clinical aspects during the first year itself, 96 participants agreed, 2 participants were neutral and 3 participants were in disagreement. (Table 7, Graph 9)

**Table 8:** Foundation course helps to get acquainted with new environment

Opinion about foundation course helps to get acquainted with new environment	No. of participants
Strongly disagree	03
Disagree	03
Neutral	17
Agree	63
Strongly agree	14

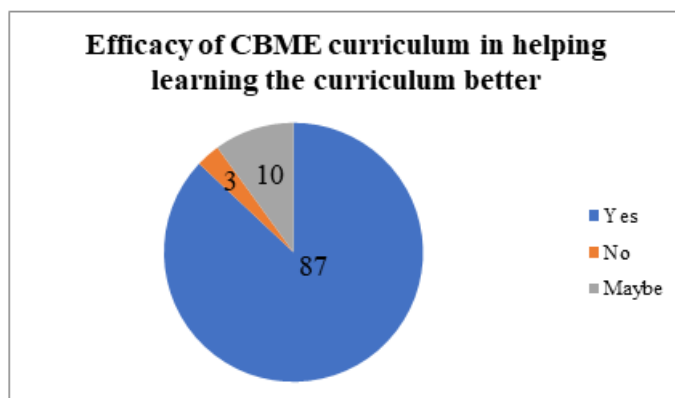


**Graph 10:** Foundation course helps to get acquainted with new environment

With regards to question whether the foundation course at the start of the curriculum helps the students get acquainted with the new environment of the institution, 14 participants strongly agreed, 63 participants agreed, 17 participants had a neutral view, 3 participants disagreed and 3 participants strongly disagreed. (Table 8, Graph 10)

**Table 9:** Overall perception about the efficacy of CBME curriculum

The newer aspects of CBME curriculum help in understanding a topic and overall curriculum better	No. of participants
Yes	87
No	3
Maybe	10



**Graph 11:** Overall perception about the efficacy of CBME curriculum

Lastly when the participants were asked their opinion whether the newer aspects of the CBME curriculum like ECE, SDL, Integrated teaching, Foundation course etc. actually help the students understand the topics and the curriculum better, 87 participants answered in affirmation, 10 participants were not sure and 3 participants answered in denial. (Table 9, Graph 11)

### Discussion

The new CBME curriculum being student centric, it was prudent to understand the students point of view on the whole newer aspects of the CBME curriculum hence the present study was undertaken to assess the knowledge and perception of first year MBBS students about the new CBME curriculum and to evaluate the effectiveness of the CBME curriculum from the student's perspective.

#### Overall awareness & perception

In our study, we found that the students were having a good amount of awareness about the new CBME curriculum implemented recently. Students have perceived the new curriculum as student centric curriculum and not teacher centric one.

#### Curriculum enhances analytical skills

With the aim to enhance analytical skills among medical graduates, the new curriculum was designed by the MCI.<sup>5</sup> Most of the participants in our study agreed in affirmation that various newer aspects of the CBME curriculum do help to enhance the analytical skills among students.

#### Preferential teaching method

To shift the orientation of the curriculum from teacher centric one to student centric one, newer modalities of teaching were introduced in the new CBME curriculum.<sup>6</sup> 72 % of the participants in our study answered that they would prefer "small group discussions" as the favoured method of teaching-learning. Hence it indicates the effectiveness of new teaching modalities like SGDs implemented in the new curriculum.

#### Method of teaching ECE



The early clinical exposure part was introduced in the new curriculum to incorporate the clinical aspects during the first year itself. In ECE, from the first year itself clinical diagnosis related aspects are covered along with the basic science correlation. 77% participants agreed that the mode of teaching Early Clinical Exposure was adequate. When participants were asked their opinion in the form of suggestions for improving the ECE sessions, they suggested that more ECE sessions in the form of small group discussions with cases discussion on live patients or simulated patients should be undertaken for a better understanding.

### **Method of teaching SDL**

The SDL component was introduced in the new CBME curriculum to promote the self-learning attitude among the students and to make students lifelong learners. In SDL, students are promoted to study the topics more effectively by searching the knowledge given outside the subject textbooks. In response to whether the method of teaching Self Directed Learning is adequate, 65% of the participants agreed that the method was sufficient and adequate. The participants further suggested that the students should be given small topics for self-preparation before those topics are taught in lectures and students should be asked to deliver seminars on those topics in front of the batch.

### **AETCOM Module**

Attitude, Ethics & Communication skills were one of the neglected parts in the syllabus of medical graduates. They have a very important role in making the best doctor out of a good one. Hence the AETCOM module was introduced in the new CBME curriculum to make IMG an effective communicator. 78% of the participants in the study agreed that the incorporation of AETCOM module in teaching has helped actually to improve the communication skills among students.

### **Integrated Teaching**

The concept of horizontal and vertical integrated teaching has been reinforced with a new zeal in the new CBME curriculum. Learning a basic science topic has become much more easy and interesting by teaching basic science with clinical science in vertical integration. 95% of the study participants agreed to this view.

### **Foundation course**

One month foundation course was introduced in the curriculum with the aim to help students get acquainted with the new environment of the institution; help them understand the basics of local language, computer skills and to inculcate a healthy habit of exercise within them. 77% of the study participants agreed that the foundation course at the beginning of the year do help them get acquainted with the new environment and surroundings.

### **Efficacy of CBME curriculum**

The overall perception about the efficacy of the new CBME curriculum was satisfactory with 87% of the study participant felt that the new curriculum was efficacious. In their feedback, they also emphasised that improvements can be made in the way the curriculum was being implemented at the institutional levels.

### **Conclusion**

With the perception that students are the best judges to assess the effectiveness of the newer changes in the curriculum, this first of its kind study was conducted. It aimed to find out the sentience and efficacy of the new curriculum. From the student's perspective, the new CBME curriculum is effective, student centric compared to the old curriculum which was teacher centric. In addition the new aspects incorporated in the curriculum like Foundation course, AETCOM module and SDL aid in overall growth of an Indian Medical Graduate and help to achieve the graduate attributes aimed for IMG. Hence this study will provide a rationale for

understanding effective implementation of the Competency Based Medical Education Curriculum.

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