



Original Article

A study on Knowledge and Attitude of Teaching Faculty in Medical College towards CBME Curriculum

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ABSTRACT

Background: Competency based medical education is increasingly being adopted as a transformative approach in medical education globally. Unlike traditional time based training models, CBME emphasizes the acquisition and demonstration of predefined competencies such as knowledge, skills, attitudes and values which are essential for safe and effective clinical practice. The present study was undertaken to assess the knowledge and attitudes of teaching faculty towards CBME curriculum at our institution.

Materials and methods: This was a cross sectional study conducted at Dr BR Ambedkar medical college, Bangalore. The study participants were teaching faculty of various cadres. A structured questionnaire on knowledge and attitude which was pretested for validity and reliability was used to collect data.

Results: The teaching faculty demonstrate a generally positive attitude and satisfactory knowledge towards the CBME curriculum. Despite this certain gaps in understanding and implementation challenges persist.

Conclusion: The study highlights the need for continuous faculty development programs, regular training workshops, institutional support to strengthen effective implementation of CBME. Enhancing faculty preparedness will contribute significantly to the successful achievement of CBME objectives.

Keywords: Competencies, curriculum, knowledge, attitude.

INTRODUCTION

Competency based medical education is increasingly being adopted as a transformative approach in medical education globally. Unlike traditional time based training models, CBME emphasizes the acquisition and demonstration of predefined competencies such as knowledge, skills, attitudes and values which are essential for safe and effective clinical practice^{1,2}.

The global shift towards CBME is driven by the need to produce medical professionals who are better prepared to meet the complex and evolving demands of modern health care systems. It promotes learner centric education, individualized progression based on performance and continuous assessment which aligns with real world clinical responsibilities.

The traditional teaching method was built on subject centered and time based curriculum. Most of the assessments were summative with minimal room for critical analysis.. The teaching learning methods emphasize on knowledge more than attitude and abilities. Hence the graduates may lack skills such as communication, doctor patient relationships, ethics and professionalism^{3,4,5}. With this background the present study was undertaken to assess the knowledge and attitudes of teaching faculty towards CBME curriculum at our institution.

MATERIALS AND METHODS

This was a cross sectional study conducted in November 2025, after obtaining ethical clearance from institutional ethics committee of Dr BR Ambedkar medical college, Bangalore. The study participants were teaching faculty of various cadres. A structured questionnaire was used to collect data on the knowledge and attitude of teaching faculty on CBME curriculum. The questionnaire was prepared based on literature review and pretested for validity and reliability. It consisted of two sections: knowledge, which consisted of questions to assess the teaching faculty's understanding on CBME and attitude, which had questions to assess the attitude of teachers towards CBME.

The data was collected and analyzed using statistical Package for the Social Sciences (SPSS) version 30.0 descriptive statistics such as frequencies and percentages were used to summarize the data. Informed consent was obtained from all participants and confidentiality was maintained by keeping the data anonymous.

RESULTS

A total of 102 teaching faculty were included in our study. The gender wise distribution was, males 48 (47%) and females 54 (53%).

Amongst them, majority were assistant professors 52 (51%), followed by associate professors 28 (27%) and 22 (21.5%) were professors (Table 1).

Table 1: Academic ranks of participants in our study

Academic rank	No of participants (n =102)
Assistant professors	52 (51%)
Associate professors	28 (27%)
Professors	22 (21.5%)

Out of 102 participants, revised basic course workshop was attended by 56 (55%), curriculum implementation support program was attended by 44 (43%) and AETCOM workshop was attended by 50 (49%).

The questionnaire on knowledge was given in MCQ basis. The response from the faculty is summarized in the following table: (Table 2)

Table 2:

No	Question	Right answer	Wrong answer
1	The GMR 2019 lays great emphasis on	46 (45%)	56 (55%)
2	The new curriculum limits lectures allotted to particular subject to only	47 (46%)	55 (54%)
3	SGD allotted to particular subject to only	29 (28%)	73 (72%)
4	Indian Medical Graduate includes all of the following except	64(63%)	38(37%)
5	CBME syllabus includes	45 (44%)	57(56%)
6	Formative assessment is	27(26%)	75(74%)
7	Methods of assessments in CBME	93(91%)	09(9%)
8	Integration includes	68(67%)	34(33%)
9	Time period allotted for electives	13(13%)	89(87%)
10	CBME is different from traditional medical education in which	85(83%)	17(17%)
11	Following is the type of Large Group teaching except	54 (53%)	48(47%)
12	The following percentage of AETCOM questions is assigned in the internal assessment	63(62%)	39(38%)

Attitudes of the study participants towards CBME curriculum is given in the following table (Table 3):

Table 3 :

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
AETCOM classes help the students in modifying their attitude towards patients	32(31%)	46(45%)	20(20%)	3(2.9%)	1 (0.9%)
SDL helps students in understanding topics better than lectures	0	5(5%)	28(27%)	44(43%)	25(25%)
Lectures are more interesting if problem based learning incorporated into them	27(26%)	65(64%)	7(7%)	2(1.9%)	1(0.9%)
Small group discussion is an effective method to enhance the understanding of the subject	33(32%)	56(55%)	11(11%)	1(0.9%)	1(0.9%)
Foundation course helps to orient the students better to MBBS course	32(31%)	53(52%)	10(10%)	5(5%)	2(1.9%)

The table presents five statements related to attitudes of faculty towards CBME and the distribution of respondent's levels of agreement. For each statement, the table shows the percentages of respondents who strongly agree, agree, are neutral, disagree and strongly disagree. 78 (76%) out of 102 participants agree that AETCOM classes help the students in modifying their attitude towards patients and 69(68%) disagree that SDL helps students in understanding topics better than lectures. 92 (90%) agree that lectures would be more interesting if problem based learning incorporated into them. 89(87%) of them believe that small group discussion is an effective method to enhance the understanding of the subject and 85(83%) agree that Foundation course helps to orient the students better to MBBS course.

Overall, our findings indicate that medical teachers generally hold a positive attitudes towards CBME, although they express some concerns about resource allocation.

Out of 102 participants 96(94%) had agreed that CBME curriculum caters the specific learning needs. 49(48%) of the participants stated that using too many audio visual aids distract the students. The remaining 53(52%) had agreed its good by using relevant AV aids.

DISCUSSION

Implemented by the National Medical Commission in 2019, CBME emphasizes outcome based learning, early clinical exposure, integration of subjects, skill acquisition, professionalism, ethics and lifelong learning, thereby aligning medical training with the health care needs of the society. A total of 102 teaching faculty participated from various departments of our institute in this study.

Males constituted 48 (47%), and females were 54(53%). Amongst them, majority were assistant professors 52 (51%), followed by associate professors 28 (27%) and 22 (21.5%) were professors. This is similar to the study conducted by Kumar M et al⁶ in which the majority of the participants were either assistant professors (36.7%) or tutors (30%), with associate professors and professors comprising the remaining 33.3%.

Out of 102 participants, revised basic course workshop was attended by 56 (55%), curriculum implementation support program was attended by 44 (43%) and AETCOM workshop was attended by 50 (49%). In a study conducted by Shivaleela et al⁵, 54.1% of 61 participants were trained in CISP program.

Rustagi SM et al⁷ conducted a study involving 58 faculties to assess the perceptions of faculty towards CBME in which Revised Basic Course Workshop (RBCW) was attended by 32 (44.8%), Attitude Ethics and Communication (AETCOM) Workshop was attended by 44 (24.1%) and Curriculum Implementation and Support Programme (CISP) Workshop was attended by 35 (39.7%).

46 (45%) were aware on GMR 2019 focuses mainly on learner centric interaction and 47 (46 %) were aware of the new curriculum limits lectures allotted to particular subject to only one third of teaching hours. In Rustagi S M et al study 46 (79.3%) out of 58 participants had awareness on hours allotted for lectures.

The large proportion 73(72%) of the faculty members were not aware that small group teaching is allotted to only two third of total hours in particular subject. However it was observed in a study by Rustagi S M et al that 81% of participants had awareness about the teaching hours allotted to small group discussion.

64(63%) and 45(44%) were aware of the role of Indian medical graduate in society and components of CBME syllabus respectively. A study by Shivaleela et al revealed that 90.2% of the faculty members were aware of the expected competencies of an Indian medical graduate.

75(74%) were not aware formative assessment is conducted during the instruction. Majority were aware about the various methods of assessments in CBME 93 (91%), different types of integration 68(67%) and how CBME is different from traditional medical education 85 (83%). 89(87%) were not aware that one month is allotted for electives. 54(53%) were aware about types of Large Group teaching and 63(62%) aware that 5% of AETCOM questions is assigned in the internal assessment

69(68%) disagree that SDL helps students in understanding topics better than lectures. 92 (90%) agree that lectures would be more interesting if problem based learning incorporated into them. 89(87%) believe that Small group discussion is an effective method to enhance the understanding of the subject

78 (76%) agree that AETCOM classes help the students in modifying their attitude towards patients. 85(83%) agree that Foundation course helps to orient the students better to MBBS course. This is similar to a study done by Shweta Rana et al⁸ 25 (83%) out of 30 participants agreed that foundation course is helpful in orienting students towards medical education and 80%of the participants were aware of the AETCOM competencies. They believed that these competencies would facilitate students acquire essential competencies in the attitudinal, ethical and communication domains.

Out of 102 participants 96 (94%) had agreed that CBME curriculum caters the specific learning needs. 49 (48%) of the participants stated that using too many audio visual aids distract the students as their focus shifts from subject to mentally dissecting the content of AV aids and it should be used in moderation for better focus of students.

The remaining 53 (52%) had agreed its good by using relevant AV aids since it makes the class interesting, enhances understanding, engages multiple senses, caters to different learning styles.

Also the present CBME curriculum emphasizes on feedback from learner/student and feedback from facilitator/teacher. Feedback is like the backbone of CBME curriculum, as it enables continuous improvement and refinement of learning. Although feedback existed in old curriculum it was informal and unstructured.

CONCLUSION

The present study assessed the knowledge and attitude of teaching faculty towards CBME curriculum. The study concludes that teaching faculty demonstrate a generally positive attitude and satisfactory knowledge toward the CBME curriculum. Despite this certain gaps in understanding and implementation challenges persist. The study highlights the need for continuous faculty development programs, regular training workshops, institutional support to strengthen effective implementation of CBME. Enhancing faculty preparedness will contribute significantly to the successful achievement of CBME objectives.

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