Original Research Article

Raichur Medical Student's Viewpoint towards CBME: Cross Sectional Pilot Study

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Abstract

This study was conducted in RIMS Government medical college and Navodaya medical college Raichur. Much awaited change in age-old practise teaching learning method for MBBS got a new update in the form of CBME. Our study was designed to understand students view point about CBME curriculum for UG students. We can conclude that RIMS, Non-CBME (2018) batch >50% students have preferred new academic tools like AETCOM, SDL, ECE, CBME Competency, Extra time for sports and Extra-curricular activity, where as CBME (2019) Batches of both the colleges RIMS and NMC, Raichur, the students of both the groups about 63-95% of students have preferred almost all the new academic tools introduced by National medical commission of India.

Keywords: Raichur,medical

Background

Much awaited change in age-old practise teaching learning method for MBBS got a new update in the form of CBME. Regulations were implemented to the MBBS course starting from academic year 2019-20 onwards under MCI and later board of governors in super session of MCI which later developed under NMC. Competency based learning designed and implemented in medical education curriculum that focuses on the desired and observable ability in real life situations CBME involves restructuring the medical training and curricular planning with focus on "competencies" and is expected to tackle these misalignments and concerns [1, 2]. Competency is defined as "the ability to do something successfully and efficiently," [3]This paradigm shift achieved after extensive training of faculty development and capacity building through workshop of the medical faculty in basic course, advance course, curriculum implementation support program (CISP), framing of draft guidelines, and rectifying those guidelines after placing them in public domain.As per new guidelines The Indian Medical Graduate (IMG) has been defined as, "a graduate possessing requisite knowledge, skills, attitudes, values and responsiveness, so that she or he may functional appropriately and effectively as a physician of first contact of the community while being globally relevant", and the new curriculum is an effort to ensure that every graduate passing out of medical colleges competent to perform these roles [4]. The competencies expected of an Indian Medical Graduate (IMG) are listed in Table 1[5].

Table1: Competencies expected of an Indian Medical Graduate

Competency	Description
Clinician	Who understands and provides preventive, promotive, curative, palliative, and holistic care with compassion
Leader and member of the health-care team and system	With capabilities to collect analyze, synthesize, and communicate health data appropriately
Communicator	With patients, families, colleagues, and community
Life-long learner	Committed to continuous improvement of skills and knowledge
Professional	Who is committed to excellence is ethical, responsive, and accountable to patients, community, and profession

Source: The Medical Council of India Vision 2015

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This study involves viewpoint from student in following parameters like early clinical exposure (ECE), AETCOM, SDL were used to asses students who were taught with CBME method against non CBME students. Early clinical exposure (ECE) is a teaching-learning methodology which fosters the exposure of medical students to the patients as early as the first year of medical college [6]. Worldwide, the number of research studies investigated the outcome of ECE and found, ECE sessions motivate the medical student in various ways making their academic strong, improve clinical skills, improve communication skills, and making them more confident [7,8]. AETCOM (attitude ethics & communication) Assessment is a vital component of competency-based education. MCI has described designed a competency-based module on attitudes and communication role of assessment is to provide feedback to the learner and help him/her to improve learning under various modules.SDL is generally defined as learning on one's own initiative, with the learner having primary responsibility for planning, implementing, and evaluating the effort [9] Some studies talked about reluctance and apprehension among teachers, learners, and educational administrators about CBME [10]. Various studies explained each component CBME none of them had any study involving student's perspective about the same. Paucity of data involving student's point of view leads to this study.

Aim

With various exhausting list of research article speaking in depth only about concepts of CBME involving various parameters like (ECE), AETCOM, SDL none of these had insight for students perspective on this . So this study was planned to best of our knowledge there is paucity of data from student's perspective.

Material & method

Study was conducted among 600 students from both RIMS & NMC Raichur during time period of 2019 to 2020 as we engulfed in Covid-19 pandemic we unable to complete the study on stipulated time due various commitments towards pandemic.

Selection of study population: 1st batch of CBME of both medical college's students were enrolled for study comprising 150 students from both batches and previous batches that were not given CBME are also enrolled

comprising 150 students from both batches. Data analysis was done. This study was approved by ethical committee of NMC medical college. Questionnaires were framed involving parameters of like AETCOM, SDL, ECE, FA and grading system was done from rating 0 to 5. Statistical analysis was made using SSPS 21 software.

Results

Cross sectional study involving 600 students. 300 students of CBME batch of both RIMS & NMC colleges. 300 students having traditional teaching and learning batches of both RIMS & NMC colleges. On analysis to response to grading from 0 to 5 for 11 academic tools of new curriculum changes are stated in below tables 2.

Table 2: Results obtained as per scoring among 600 students

	Academic Tools	% OF STUDENTS OPTED >3 SCORE			
		RIMSCBME 2019	NMC CBME 2019	RIMS NONCBME 2018	NMC NON CBME 2018
1	AETCOM	97.8%	93%	60.6%	45.9%
2	SDL	92.8%	92%	53.2%	47.5%
3	ECE	97.1%	88.6%	82.6%	50.8%
4	CBME	97.8%	89.2%	61.5%	49.2%
5	Extra time for sports.	70%	63.8%	65.1%	59%
6	Extra- curricular activity.	72%	79.2%	58.7%	55.7%
7	FA	95%	89.2%	36.7%	49.2%
8	Increase in teaching hours /day.	89%	86.6%	20.2%	32.8%
9	Decrease in time for dissection.	88.5%	76.6%	45%	32.8%
10	Grading for discipline.	89%	89.3%	28.4%	50.8%
11	Grading for record book.	92%	81.2%	28.4%	41%

Discussion

According to new CBME teaching included in medical education, different academic tools/ protocols were used to teach MBBS students 2019 batch onwards. All the tools of CBME were listed and each tool scoring/grading was allotted from zero to five as follows

Table 3:Tools and scoring

	ACADEMIC TOOLS	SCORING
1	AETCOM	0-WROST
2	SDL	1-VERY BAD
3	ECE	2-BAD
4	CBME	3-GOOD
5	Extra time for sports.	4-VERY GOOD
6	Extra- curricular activity.	5- EXCELLENT
7	FA	
8	Increase in teaching hours /day.	
9	Decrease in time for dissection.	
10	Grading for discipline.	
11	Grading for record book.	

Students were explained about each academic tool in detail and both CBME and Non-CBME batches were asked to allot score for each academic tool. The data was collected from 2018 (Non-CBME) and 2019 (CBME) batches of RIMS, Raichur and NMC, Raichur.As per data collected from 2018 Non-CBME batch of RIMS Raichur, for 1) AETCOM 60.6% of the students have given score more than three (>3), and for the other academic tools scoring is as follows, for 2)SDL =53.2%, 3)ECE= 82.6%, 4)CBME competency =61.5%, 5)Extra time for sports=65%, 6)Extra-curricular activity = 58.7% , 7) Formative assessment = 36.7% 8) Increase in teaching hours /day = 20.2%, 9)Decrease time for dissection=45% ,10) Grading for discipline =28.4%, 11) Grading for record book = 28.4% . From the above data it shows that more than 50% of students preferred new academic tools like AETCOM, SDL, ECE, CBME Competency, Extra time for sports and Extra time for extracurricular activity. In the same group less than 50% have preferred academic tools like formative assessment, increase in teaching hours/day, decrease in time for dissection, grading for discipline and record book.As per data collected from CBME(2019) batch, RIMS, Raichur for 1) AETCOM 97.8% of the students have given score more than three (>3), and for the other academic tools scoring is as follows, for 2)SDL =92.8%, 3) ECE= 97%,4) CBME competency=97.8%,5)Extra time for sports=70%, 6)Extra-curricular activity = 72%,7) Formative assessment = 95% 8) Increase in teaching hours /day = 89%, 9)Decrease time for dissection= 88.5% ,10) Grading for discipline =89%, 11) Grading for record book = 92%. From above data it is clear that more than 70% of students have preferred all the new academic tools introduced by National medical commission, India. This is the feedback collected from CBME (2019) and Non-CBME Batches of Govt. medical college, RIMS, Raichur. Now let us analyze the data collected from private medical college, NMC, Raichur. Data of Non- CBME batch , NMC, Raichur is as follows for 1) AETCOM= 45.9% of the students have given score more than three (>3), and for the other academic tools scoring is as follows, for 2)SDL =47.5%, 3)ECE= 50.8%, 4)CBME competency =49.2%, 5)Extra time for sports=59%, 6)Extra curriculum activity = 55.7% , 7) Formative assessment = 49.2% 8) Increase in teaching hours/day=32.8%, 9)Decrease in time for dissection=32.8 ,10) Grading for discipline =50.8, 11) Grading for record book = 41% . Above data shows that more than 50% of students have preferred new academic tools like ECE, Extra time for sports and Extra time for extracurricular activity . In the same group less than 50% have preferred academic tools like AETCOM, SDL, CBME Competency, formative assessment, increase in teaching hours/day, decrease in time for dissection, grading for discipline and record book.As per data collected from CBME(2019) batch, NMC, Raichur for 1) AETCOM 93% of the students have given score more than three (>3), and for the other academic tools scoring is as follows, for 2)SDL =92%, 3)ECE= 88.6%, 4)CBME competency =89.2%, 5)Extra time for sports=63.8%, 6)Extracurricular activity = 79.2% , 7) Formative assessment = 89.2% 8) Increase in teaching hours /day = 86.6%, 9)Decrease time for dissection=76.6% ,10) Grading for discipline =89.3%, 11) Grading for record book = 81.2%. From above data shows that more than 50% of students, almost 63-93% have preferred all the new academic tools introduced by National medical commission, India. This is the feedback collected from CBME (2019) and Non-CBME Batches of private medical college, NMC, Raichur.

Conclusion

From the above study we can conclude that RIMS, Non-CBME (2018)batch >50% students have preferred new academic tools like AETCOM, SDL, ECE, CBME Competency, Extra time for sports and Extra-curricular activity, where as NMC,Raichur, Non-CBME (2018)batch >50% students have preferred new academic tools like ECE, Extra time for sports, and Extra-curricular activity and Grading for discipline. Now from these two different groups RIMS and NMC, Raichur if we pick common academic tools which are preferred are ECE, Extra time for sports and Extra-curricular Activity.Now if we have look at the CBME (2019) Batches of both the colleges RIMS and NMC , Raichur, the students of both the groups about 63-95% of students have preferred almost all the new

academic tools introduced by National medical commission of India. If Non-CBME students are practically taught through new curriculum of NMC of India we can assume that, even they would prefer CBME changes. Hence we can conclude that the changes made by National medical commission of India in medical academic activities have been preferred by most of the medical students and they are enjoying it. Further studies can be done after getting the results of CBME Batch students and can be compared with the Non-CBME batch students.

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Students response proforma

NAME-			**GENDER- M / F**	**ROLL NO-**	
BATCH /YEAR			2018	2019	
COLLEGE			RIMS RAICHUR	NMC RAICHUR	
CBME teaching	YES	NO	FOUNDATON COURSE	YES	NO

(I).GRADING FOR CBME CHANGES (AS PER MASTER TIMETABLE 2019)

0-WORST	1-VERY BAD	2-BAD	3-GOOD	4-VERY GOOD	5-EXCELLENT

1.AETCOM-	2.SDL-	3.ECE-	4.CBME COMPETENCY
5.Dedicated Time Sports-	6.Dedicated Time Extracurricular Activity	7.Dedicated Time Formative Assessment	
8.Increase In Teaching Hours/Day	9.Reduction In Dissection Time Duration-	10.Grades Discipline	11.Grades Record Books

*FOR NON CBME students which of the above 11 parameter is preferred in master timetable-

(II).GRADING OF COMFORT ZONE AFTER FOUNDATION COURSE

0- Discomfort	1-Very Less Discomfort	2-Less Discomfort	3-Moderate Discomfort	4-Comfortable	5-More Comfortable

12.Exposure To Lecture Hall	13.Exposure To Hostel	14.Exposure To Library	15.Exposure To Anatomy Dissection	16.Exposure To Anatomy Lab	17.Exposure To Anatomy Histolab	18.Exposure To Biochemistry Lab	19.Exposure To Physiology Lab
20.Exposure To Faculty After FC	21.Exposure To 1st Year Subjects After FC	22.Exposure To Medical Field After FC	23.Exposure To Stress Management After FC	24.Exposure To Yoga/ Meditation After FC	25.Exposure To Local Languages After FC	26.Exposure To Hospital After FC	27.Exposure To CHC/PHC After FC

Abbreviations

1. AETCOM- Attitude Ethics Communication Skills
2. SDL- Self Directed Learning
3. ECE- Early Clinical Exposure
4. CBME –Competency Based Medical Education
5. CISP-Curriculam Implementation Support Programme
6. FA-Formattive Assessement
7. FC- Foundation Course
8. IMG- Indian Medical Graduate

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