

# Perception of Faculty Regarding Competency-based Medical Education: A Qualitative Study from Mizoram, India

GANESH SHANMUGASUNDARAM ANUSUYA<sup>1</sup>, SABITA YOGRAJ<sup>2</sup>, MANOJ BALAJI PATKI<sup>3</sup>, AJAY KUMAR<sup>4</sup>

## ABSTRACT

**Introduction:** Competency-based Medical Education (CBME) has been implemented in India for undergraduate medical students since 2019. Understanding faculty perceptions regarding CBME will help identify barriers and suggestions for its better implementation. However, there have been limited studies conducted on this aspect in Northeast India.

**Aim:** To examine the perception of teaching faculties at Zoram Medical College in Mizoram, India, regarding CBME. Additionally, it aims to identify barriers and suggestions for the improved implementation of CBME in the medical college through Focus Group Discussions (FGDs).

**Materials and Methods:** A qualitative study was conducted at Department of Community Medicine, Zoram Medical College, Falkawn, Mizoram, India, involving FGDs with teaching faculties from May 2021 to April 2022. A total of 11 main FGDs were conducted with 36 faculty members. Each FGD involved a minimum of three participants and a maximum of six participants. The FGDs were recorded using mobile phones, and the audio recordings were transcribed verbatim. Themes were identified and entered into an Excel sheet for analysis. Statistical analysis was performed using the Chi-square test/Fisher's-exact test.

**Results:** The study included faculty members with a mean age of  $41.06 \pm 7.24$  years (range: 31 to 69). The majority of the study population (58.33%) were females, and 20 (55.56%) were Assistant Professors. Small group teaching was reported to be followed by 29 (80.56%) participants, while 32 (88.89%) followed both summative and formative assessment. All faculty members (100%) expressed the need for refresher courses for those who have already undergone training programs. Awareness regarding changes in marks allotment was only 69.44%. The major challenges reported included a shortage of faculty (50%), difficulties in implementing integration (36.1%), competency-related challenges (30.5%), and infrastructure-related challenges (19.4%). Suggestions for improvement included increasing the number of faculties (97.2%), providing more training and workshops (52.7%), and ensuring uniformity in implementation by the National Medical Council (NMC) (36.1%).

**Conclusion:** The faculty members perceived that CBME can be effectively implemented by increasing the number of faculties, providing frequent training, and ensuring uniformity in implementation across all medical colleges in India.

**Keywords:** Barriers, Focus group discussion, Implementation, Medical undergraduate, Themes

## INTRODUCTION

The Medical Council of India (MCI) first mentioned the move towards Competency-based Medical Education (CBME) in its 2015 vision document [1]. CBME has been implemented for undergraduate medical students across all medical colleges in India since 2019. The MCI has included the Attitude, Ethics, and Communication Module (AETCOM) and basic competencies for Indian Medical Graduates (IMGs) [2]. They have also recommended that competency-based learning be implemented in all medical colleges, with curricula designed to address real-life situations. The expected competencies of an IMG include being a clinician, leader, effective communicator, lifelong learner, and professional [2,3].

Efforts have been made by the MCI and the current National Medical Commission (NMC) to train medical college teaching faculty in medical education through courses like Basic Course Workshop (BCW), revised BCW, and Curriculum Implementation and Support Programme (CISP) [4]. However, it is necessary to assess the perspectives of these teachers on CBME, including their awareness, practices, and barriers to implementation. Understanding their perspectives can help improve the implementation of CBME.

Several studies have been conducted in India on CBME and its perception by faculty members, but most of them have used Google Forms [5-10]. Conducting FGDs with medical college faculties can provide more detailed information on CBME-related practices. Many medical colleges are facing challenges in implementing and practicing CBME.

Therefore, the present study was conducted to examine the perception of teaching faculties about CBME at Zoram Medical College in Mizoram, India. The study aimed to identify barriers and gather suggestions for better implementation of CBME through FGDs.

## MATERIALS AND METHODS

This qualitative study was conducted at Department of Community Medicine, Zoram Medical College, Falkawn, Mizoram, India, involving teaching faculties. FGDs were conducted from May 2021 to April 2022 after obtaining clearance from the Institutional Ethical Committee (IEC) (IEC approval No.F.20016/1/18-ZMC/IEC/33). Participants provided written or verbal consent, considering the pandemic situation.

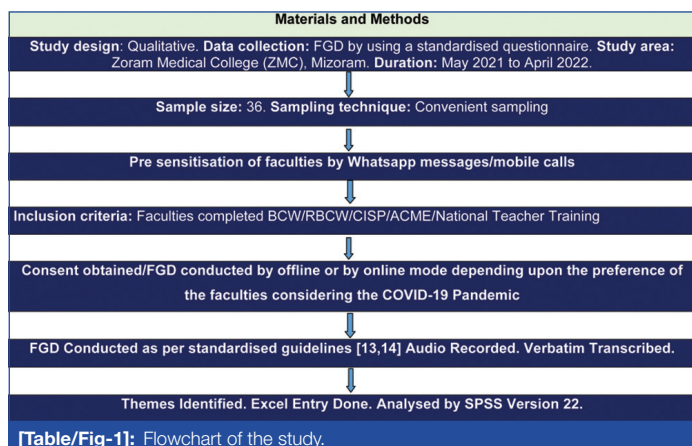
**Inclusion criteria:** All faculties from Zoram Medical College who have completed BCW, RBCW, CISP, ACME, or any other medical education training in the past 15 years were included. Senior faculties with exposure to CBME curriculum and those teaching phase 1 subjects were also included.

**Exclusion criteria:** Faculties who were not willing to participate were excluded from the study.

**Sample size calculation:** Considering this qualitative study, a minimum sample size of 30 was set [11]. Additionally, for data collection through FGDs, data saturation can typically be achieved with 2 to 40 FGDs [12]. Ultimately, the study was completed with a sample size of 36 participants, enrolled through convenience sampling, and 11 FGDs.

## Study Procedure

Data was collected through FGDs using a study questionnaire. [Table/Fig-1].



**Focus Group Discussion (FGD):** Participants were contacted personally, through mobile phones, and via WhatsApp messages. An invitation explaining the study and requesting the participation of those who had completed the Revised Basic Course (RBCW) was shared in the RBCW college WhatsApp group. Heads of departments were individually contacted and requested to participate in the FGDs. The study questionnaire related to the FGD was shared in the RBCW college WhatsApp group and individually through WhatsApp to the participants.

Participants were given the choice of participating either online or offline, considering the Coronavirus Disease-2019 (COVID-19) pandemic. A total of 11 sessions were conducted, ranging from 12 to 32 minutes in duration. The FGD sessions were scheduled on different days based on faculty availability. All 11 FGDs were completed within a one-month period. The principal investigator prepared a separate questionnaire for conducting the FGD, which was validated and reviewed by two subject experts. The FGD sessions followed standard guidelines for conducting FGDs and setting up the questionnaire [13,14].

**Study questionnaire:** The study questionnaire was divided into three parts. Part 1 included general questions such as name, age, sex, department, years of teaching experience, and faculty development programs undergone. Part 2 consisted of 10 questions related to the perception of CBME. Part 3 contained five questions related to barriers and suggestions for improving CBME implementation. In addition, participants were given the opportunity to provide any open suggestions related to CBME. Part 1, which included basic participant details, was collected through WhatsApp. Part 2 and Part 3 of the questionnaire were discussed during the FGDs. The study questionnaire was developed by the principal investigator in collaboration with field experts, peer-reviewed, and piloted through two FGDs.

**Pilot FGD:** Two pilot FGDs were conducted before the main study to validate the study questionnaire. One FGD involved a group of four participants, and the other involved a group of three participants, including the moderator. Based on the pilot FGDs, certain questions were added to the main study questionnaire. The moderator also noted that some participants were not comfortable answering certain questions during the FGD, such as their age. Therefore, such data were collected directly from the participants through WhatsApp. The data collected from the pilot FGDs were not included in the main study and were not included in the analysis.

**Main FGD:** After the pilot FGD, it was decided to collect the first component of the study questionnaire individually from the faculties. Basic details such as name, age, sex, number of years of teaching experience, designation, and training undergone were collected either over the phone or in person. The questions related

to perception, practices, awareness, barriers, and suggestions for better implementation of CBME were collected using the FGD method. For online FGDs, links to Google or Zoom meetings were shared with the participants, and the FGDs were recorded using mobile phones.

**Verbatim transcripts:** The audio recordings of the FGDs were transcribed word by word by listening to the audio. The transcripts were handwritten in a notebook, and the main themes that emerged were identified. While writing the verbatim transcript to protect the participants' identities, their names were renamed or mentioned as P(1), P(2), P(3). Time stamps were also added to each question for later verification. The identified themes were then entered into Excel and converted into quantitative variables.

## STATISTICAL ANALYSIS

The statistical analysis was performed using Statistical Package for Social Sciences (SPSS) Software version 22.0. Descriptive analysis included mean and standard deviation for quantitative variables, and frequency and proportion for categorical variables. Non normally distributed quantitative variables were summarised using the median and Interquartile Range (IQR). Data were also represented using appropriate diagrams such as bar diagrams, pie diagrams, and tables. Normal distribution of quantitative variables within each category of explanatory variables was checked visually using histograms and normality Q-Q plots. The Shapiro-Wilk test was also conducted to assess normal distribution, with a p-value >0.05 considered as normal distribution. Categorical outcomes were compared between study groups using the Chi-square test/Fisher's-exact test (Fisher's-exact test was used if the overall sample size was <20 or if the expected number in any one of the cells was <5). A p-value <0.05 was considered statistically significant.

## RESULTS

In the present study, out of the 36 study participants, the majority 27 (75%) opted to attend the FGDs online. A total of 11 FGD sessions were conducted, with 18 (50%) of the study population from clinical departments. The minimum time taken for a session was 11 minutes and 19 seconds, while the maximum time taken was 31 minutes and one second. The average time taken in minutes (Mean±SD) for all the FGDs was 18.84±6.86 [Table/Fig-2]. The majority of the study population were females 21 (58.33%), 20 (55.56%) held the rank of assistant professor, and 32 (88.89%) had completed CISP Training. Additionally, 63.89% had undergone the Revised Basic Course in Medical Education. The mean number of years of teaching experience was 10.75±6.78 [Table/Fig-3].

Parameters	Values
Total number of FGD conducted	11
Total number of departments attended the FGD	14
Minimum number of participants in a FGD	3
Maximum number of participants in a FGD	6
Median number of participants	4
Minimum time taken in minutes per FGD	11 minutes 19 seconds
Maximum time taken in minutes per FGD	31 minutes 1 seconds
Mean time taken in minutes (Mean±SD)	18.84±6.86
Median time taken in minutes	19.15
<b>Mode of FGD preferred/attended</b>	<b>n (%)</b>
Offline mode	9 (25)
Online mode	27 (75)
<b>Type of department</b>	<b>n (%)</b>
Clinical department	18 (50%)
Paraclinical department	8 (22.22%)
Preclinical department	10 (27.78%)

[Table/Fig-2]: Baseline characteristics of Focus Group Discussion (FGD).

Parameters	n (%)
<b>Age (Mean±SD)</b>	41.06±7.24 (range 31 to 69)
<b>Gender</b>	<b>n (%)</b>
Female	21 (58.33%)
Male	15 (41.67%)
<b>Designation</b>	<b>n (%)</b>
Demonstrator	4 (11.11%)
Assistant Professor	20 (55.56%)
Associate Professor	8 (22.22%)
Professor and Head	4 (11.11%)
Teaching experience (Mean±SD) (years)	10.75±6.78 (range 2.5 to 41.0)
<b>Faculty development programme attended</b>	<b>n (%)</b>
Basic course in medical education	5 (13.89%)
Revised basic course and AETCOM	23 (63.89%)
Curriculum implementation and support programme (CISP)	32 (88.89%)
Advance course in medical education (ACME)	2 (5.56%)
National teacher training course	2 (5.56%)

[Table/Fig-3]: Baseline characteristics of the study participants.

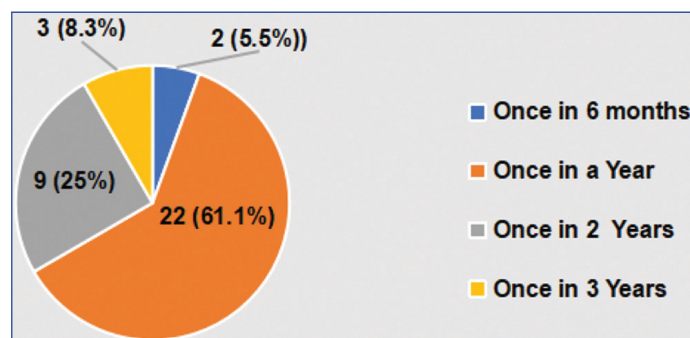
In the present study, 32 (88.89%) participants perceived that CBME implementation in their college was in the beginning stage. Additionally, 29 (80.56%) felt that small group teaching was followed, and 32 (88.89%) believed that both summative and formative assessments were followed in their departments. Regarding awareness of the new mark allotment, 25 (69.44%) participants were aware. The majority, 35 (97.22%), faced challenges in implementing CBME. Out of the total, 29 (85.29%) agreed that CBME is better than the old method of teaching, while two faculties refused to comment on which teaching method is better [Table/Fig-4].

Questions related to CBME	Yes n (%)	No n (%)
<b>Questions related to perception of faculty related to CBME</b>		
Whether CBME followed in your Dept/College	36 (100)	0
CBME is in the beginning stage of implementation	32 (88.89)	4 (11.11)
CBME is in the intermediate stage of implementation	4 (11.11)	32 (88.89)
Whether time table followed as per CBME	36 (100)	0
Whether CBME will produce better IMG	35 (97.22)	1 (2.78)
Whether small group teaching followed in your department	29 (80.56)	7 (19.44)
Is early clinical exposure good for students	36 (100)	0
Summative and formative assessment followed in your department	32 (88.89)	4 (11.11)
Innovative teaching methodologies followed in your department	21 (58.33)	15 (41.67)
Innovative assessment methods followed in your department	15 (41.67)	21 (58.33)
Whether aware about the new marks allotment for exams	25 (69.44)	11 (30.56)
<b>Questions related to barriers and suggestions for improving the conduct of CBME</b>		
Do you face any challenges in implementing CBME	35 (97.22)	1 (2.78)
Whether increase In number of faculties needed	35 (97.22)	1 (2.78)
Is refresher course needed for better implementation of CBME	36 (100)	0
Did COVID-19 pandemic hindered the implementation of CBME	34 (94.44)	2 (5.56)
Is CBME is better than old method of teaching curriculum (N=34) as two faculties did not comment for this question	29 (85.29)	5 (14.71)

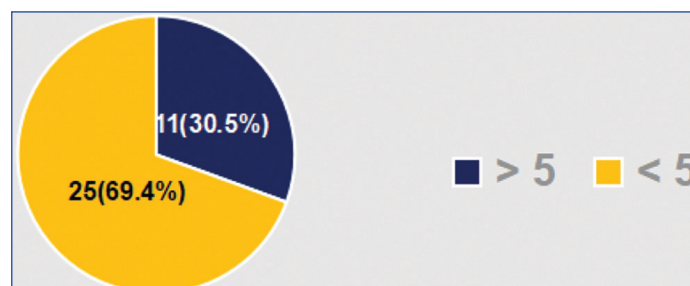
[Table/Fig-4]: Faculties perception related to CBME.

From [Table/Fig-5], authors can observe that the majority, 22 (61.1%), of the study participants felt that a refresher course related to medical education should be conducted in the college once a year. According to [Table/Fig-6], nearly 11 (30.5%) of the study participants agreed that for effective implementation of CBME, more

than five additional faculties would be needed in their department, as per the current NMC guidelines.

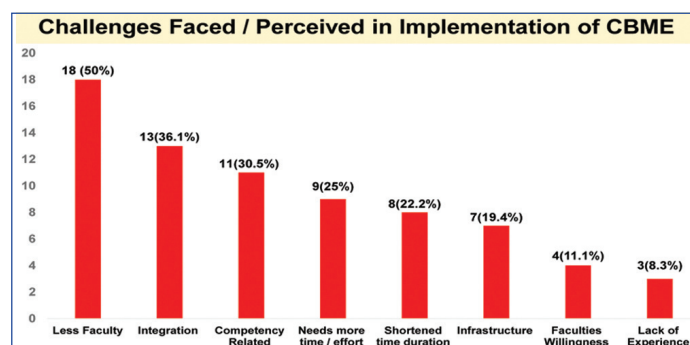


[Table/Fig-5]: Opinion regarding the need for refresher course.



[Table/Fig-6]: Number of more faculties needed.

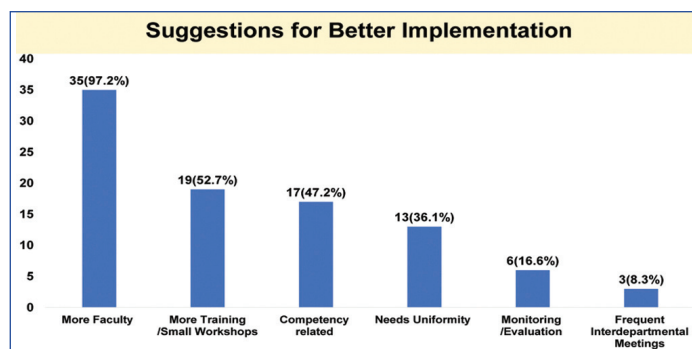
The [Table/Fig-7] below shows that the major challenges faced in implementing CBME in the medical college were n (%) mainly attributed to a shortage of faculty 18 (50%), challenges in implementing integration 13 (36.1%), and competency-related challenges 11 (30.5%). Additionally, 8 (22.2%) faculty members mentioned that shortening the duration of phase 1 and phase 2 subjects was also a major challenge in implementation. Competency-related challenges refer to situations where some participants felt that implementing certain competencies was challenging due to a small number of faculties in their department. Furthermore, some participants felt that certain competencies were not included in the current curriculum. The participants felt that the framing of competencies could have been better.



[Table/Fig-7]: Challenges faced/perceived in implementation of CBME.

Regarding suggestions for better implementation of CBME, the [Table/Fig-8] shows that nearly 35 (97.2%) participants suggested increasing the number of faculty in their departments. Additionally, 19 (52.7%) suggested more training and small workshops, 17 (47.2%) suggested competency-related changes, and 13 (36.1%) mentioned that all components of CBME should be implemented uniformly by nodal centres or by the NMC. Six (16.6%) participants felt that CBME should be evaluated and monitored, and 3 (8.3%) suggested frequent interdepartmental meetings. Competency-related suggestions included participants feeling that the competencies should be more elaborate, broad, and inclusive of all chapters.

In [Table/Fig-9], comparisons were made between parameters such as age group, gender, department type, designation, and



[Table/Fig-8]: Suggestion for better implementation of CBME.

teaching experience to analyse who perceived CBME as a better method compared to old teaching methods. The present study did not find any statistically significant findings when comparing these parameters. As two faculties did not want to comment on which

Parameters	CBME versus		p-value
	Old method is better	CBME is better	
<b>Age group</b>			
<=40 years (n=18)	2 (11.11%)	16 (88.89%)	0.648*
>40 years (n=16)	3 (18.75%)	13 (81.25%)	
<b>Gender</b>			
F (n=20)	1 (5%)	19 (95%)	0.135*
M (n=14)	4 (28.57%)	10 (71.43%)	
<b>Department type</b>			
Clinical (n=18)	1 (5.56%)	17 (94.44%)	0.279**
Paraclinical (n=8)	2 (25%)	6 (75%)	
Preclinical (n=8)	2 (25%)	6 (75%)	
<b>Designation</b>			
Associate Professor and Professor and Head (n=11)	2 (18.18%)	9 (81.82%)	1.000
Assistant Professor and demonstrator (n=23)	3 (13.04%)	20 (86.96%)	
<b>Teaching experience</b>			
<=10 (n=23)	2 (8.7%)	21 (91.3%)	0.300*
>10 (n=11)	3 (27.27%)	8 (72.73%)	

[Table/Fig-9]: Comparison of baseline parameters between CBME versus old teaching method (N=34).

\*Fisher's-exact p-value, \*\*Chi-square test

Parameters	Rustagi SM et al., study [6]	Ramanathan R et al., [5]	Soundariya K et al., [10]	Present study
Study sample	58	297 faculties including 91 Medical Colleges in 20 states	594 participants including faculties and students	36
Method of data collection	Google forms	Google forms	Google form	Focus Group Discussion
Study place and year	New Delhi 2019	91 Medical Colleges across 20 states in India 2020	Chennai 2021	Zoram Medical College Mizoram, 2022
RBCW attended	44.8%	43.5%		63.89%
CISP attended	39.7%	50%		88.8%
Better IMG will be produced as a result of implementing CBME	51.7%	Yes	71.8%	97.2%
Early clinical exposure is good for students	86.2%	70%	67.1%	100%
Changes in marks allotment	58.6%	Not mentioned	Not mentioned	69.4%
Open ended comments/ conclusions	Shortage of faculty members for small group teaching would be a major challenge	Reducing the duration of foundation course, faculty development program, increasing the faculty strength	Since, it is difficult to cope up with the sudden transition to the newly implemented curriculum, as it requires tedious planning, downtime, manpower, and changes in the teaching-learning process a hybrid approach can be considered in which the newly implemented CBME curriculum is incorporated into the existing conventional curriculum. This slow transition can allow time for better designing and implementation of the new curriculum.	We need more faculties without that not able to do Small Group Teaching. A 50% of the study participants felt that less number of faculty as a major challenge for implementing CBME

[Table/Fig-10]: Comparison of parameters of present study with other similar studies [5,6,10].

teaching method is better, they were not included in the present analysis, resulting in a total of 34 participants.

## DISCUSSION

The present study is the first study, to the best of the authors' knowledge, that has been conducted regarding the perspectives of medical college teaching faculties on CBME using FGD as a method for data collection. The present study can be compared with another similar study conducted by Rustagi SM et al., [6]. The present study also assessed the perception of medical college teaching faculties in relation to CBME, like the present study. The major difference was that Rustagi SM et al., used Google Forms for data collection, while the present study used FGD.

From [Table/Fig-10], it can be observed that there was an increase in the number of faculties being trained in RBCW and CISP in the present study compared to the study by Rustagi SM et al., [5,6,10]. The faculties' perception had also changed, from only 51.7% feeling that better doctors would be produced by implementing CBME to 97.2%. This change could be attributed to a larger number of faculties being trained and the gradual increase in acceptance of CBME over time. The only thing that has not changed is that in both studies, it was mentioned that there is a need for more faculties for effective implementation of some components of CBME, especially small group teaching.

The present study also showed that nearly 94.4% agreed that the COVID-19 pandemic had hampered CBME. A similar finding stating that the COVID-19 pandemic had hindered the execution of CBME was mentioned as a challenge in the implementation of CBME in a study published by Sahadevan S et al., [7]. In the present study, when asked whether CBME was better compared to old teaching methods or curriculum, nearly 85.29% of the study population agreed or perceived that CBME was better than old teaching methods. This was comparable to a study done by Pandit S et al., in which the authors conducted a comparative study to assess the efficacy of CBME and the Traditional Structured (TS) method in selected competencies of the first-year Bachelor of Medicine Bachelor of Surgery (MBBS) curriculum as a pilot study [8]. In that study, they found that by following CBME, students performed well in the competencies of living anatomy [8].

Another study by Ramanathan R et al., which was a multicentric cross-sectional study conducted in 20 states involving 297 teaching faculty in 91 medical colleges all over India between February and July 2020 [5].

In Ramanathan R et al.,'s study, the perception regarding CBME was collected by sending Google Forms [5]. Nearly 80% of the participants reported that the faculty was not adequate for successful implementation of CBME. This is comparable to the present study, which showed that nearly 50% perceived a shortage of faculty as a challenge, and 97.2% agreed that more faculty were needed for better implementation of CBME. In Ramanathan R et al.,'s study, nearly 70.4% accepted early clinical exposure, while in the present study, 100% perceived early clinical exposure as a beneficial component of CBME.

A study conducted by Soundariya K et al., in Chennai, Saveetha Medical College, also concluded that there is a need for an increase in manpower and that the transition to CBME should be a slow process [10]. The major difference from the present study is that their sample size included both students and faculties, while the present study included only faculties, and the data in their study was collected through Google Forms.

The present study's findings strongly recommend that the NMC reassess the minimum number of faculties required in each department and consider increasing the number of faculties for effective implementation of CBME. A refresher course may be conducted once a year by the Nodal centres or by the Medical Education Unit of the college for faculties who have already completed RBCW and CISP. The refresher course can focus only on the main aspects of CBME. The norms related to the refresher course could be created by the NMC or by the Medical Education Unit (MEU) Team of the individual medical college based on the need. NMC can also suggest more uniformity in the implementation of all components of CBME to all medical colleges across India.

### Limitation(s)

The present study had some limitations due to the COVID-19 pandemic situation. Because of the pandemic, not all focus group discussions could be conducted offline, and a significant portion of the FGDs had to be conducted online. Due to the online nature of the FGDs, internet issues were encountered in a few instances.

### CONCLUSION(S)

The present study revealed that CBME was being followed in all departments, but it was still in the beginning stage. The major challenges perceived were related to the number of faculty, integration and alignment, competency-related challenges, time constraints, shortened duration of the course period, and infrastructure. The major suggestions for better implementation of CBME included increasing the number of faculties, conducting frequent refresher courses, and ensuring uniformity in implementing CBME by the NMC nodal centres in all medical colleges in India.

**Next step:** The present study has identified certain perceptions, barriers, and suggestions for the better implementation of CBME.

A similar multicentric study using FGDs should be conducted, involving more medical colleges across India.

### Acknowledgement

The authors would like to express special thanks to Convener Dr. Dinesh K Badyal Sir and Co-convener Dr. Monika Sharma Mam, Nodal Centre, CMC, Ludhiana, for their constant support. The authors would also like to acknowledge the faculties and administration of Zoram Medical College, Mizoram, for participating in the FGDs and providing their valuable time and opinions about CBME during the COVID-19 pandemic.

### REFERENCES

- [1] Vision 2015. New Delhi: Medical Council of India; 2011. Medical Council of India. [Last accessed on 7<sup>th</sup> April 2022]. Available from: [http://www.mciindia.org/tools/announcement/MCL\\_booklet.pdf](http://www.mciindia.org/tools/announcement/MCL_booklet.pdf).
- [2] Shah N, Desai C, Jorwekar G, Badyal D, Singh T. Competency-based medical education: An overview and application in pharmacology. *Indian J Pharmacol.* 2016;48(Suppl 1):S5-S9. Doi: 10.4103/0253-7613.193312. PMID: 28031599; PMCID: PMC5178056.
- [3] Medical Council of India Regulations on Graduate Medical Education. 1997. [Last accessed on 30<sup>th</sup> March 2021]. Available from: [http://www.mciindia.org/Rules-and-Regulation/GME\\_REGULATIONS.pdf](http://www.mciindia.org/Rules-and-Regulation/GME_REGULATIONS.pdf).
- [4] National Medical Commission. National Faculty Development Programme. [Last Accessed on 6<sup>th</sup> November 2023]. Available at: <https://www.nmc.org.in/information-desk/3-ongoing-faculty-development-programs/>.
- [5] Ramanathan R, Shanmugam J, Sridhar MG, Palanisamy K, Narayanan S. Exploring faculty perspectives on competency-based medical education: A report from India. *J Educ Health Promot.* 2021;10:402. Doi: 10.4103/jehp.jehp\_1264\_20. PMID: 34912938; PMCID: PMC8641753.
- [6] Rustagi SM, Mohan C, Verma N, Nair BT. Competency-based medical education: The perceptions of faculty. *J Med Acad.* 2019;2(1):01-05.
- [7] Sahadevan S, Kurian N, Mani AM, Kishor MR, Menon V. Implementing competency-based medical education curriculum in undergraduate psychiatric training in India: Opportunities and challenges. *Asia Pac Psychiatry.* 2021;13(4):e12491. Doi: 10.1111/appy.12491. Epub 2021 Dec 7. PMID: 34873854
- [8] Pandit S, Thomas MR, Banerjee A, Angadi M, Kumar S, Tandon A, et al., A crossover comparative study to assess efficacy of competency-based medical education (CBME) and the traditional structured (TS) method in selected competencies of living anatomy of first year MBBS curriculum: A pilot study. *Med J Armed Forces India.* 2019;75(3):259-65. Doi: 10.1016/j.mjafi.2018.01.010. Epub 2018 Mar 6. PMID: 31388227; PMCID: PMC6676323.
- [9] Selva P, Rithika M. Perspectives of students and teaching faculty members towards the new MBBS curriculum in a tertiary care hospital in Chennai. *Int J Cur Res Rev.* 2021;13(8):120-26. Doi: <http://dx.doi.org/10.31782/IJCRR.2021.13810>.
- [10] Soundariya K, Kalaiselvan G, Rajalakshmi M, Sindhuri R. Implementation and evaluation of competency-based medical education in phase I of undergraduate medical curriculum. *J Adv Med Educ Prof.* 2022;10(4):228-34. Doi: 10.30476/JAMP.2022.94999.1616. PMID: 36310668; PMCID: PMC9589072.
- [11] SIS International Research NYC Focus Group Facility. Greenbook. What is the ideal Sample Size in Qualitative Research? [Last Accessed on 16<sup>th</sup> October 2023]. Available at: <https://www.greenbook.org/marketing-research/What-is-the-ideal-Sample-Size-in-Qualitative-Research-1022244>.
- [12] Guest G, Namey E, McKenna K. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods.* 2017;29(1):03-22.
- [13] How to conduct a successful Focus Group Discussion. *Humans of data.* 2017. [Last accessed on December 7<sup>th</sup> 2021]. Available at: <https://humansofdata.atlan.com/2017/09/conduct-successful-focus-group-discussion/>.
- [14] Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int J Qual Health Care.* 2007;19(6):349-57. Available at: <https://academic.oup.com/intqhc/article/19/6/349/1791966>.

#### PARTICULARS OF CONTRIBUTORS:

1. Professor and Head, Department of Community Medicine, Nagaland Institute of Medical Sciences and Research, Kohima, Nagaland, India.
2. Professor and MEU Coordinator, Department of Physiology, Government Medical College, Kathua, Jammu and Kashmir, India.
3. Professor and Head, Department of Community Medicine, Zoram Medical College, Falkawn, Mizoram, India.
4. Professor, Department of Biochemistry, Christian Medical College, Ludhiana, Punjab, India.

#### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Ganesh Shanmugasundaram Anusuya,  
Professor and Head, Department of Community Medicine, Nagaland Institute of  
Medical Sciences and Research, Kohima-797003, Nagaland, India.  
E-mail: drgany2007@rediffmail.com; drgany2015@gmail.com

#### AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for the present study? Yes
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. Yes

#### PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Sep 12, 2023
- Manual Googling: Nov 04, 2023
- iThenticate Software: Sep 27, 2023 (4%)

#### ETYMOLOGY: Author Origin

#### EMENDATIONS: 7

Date of Submission: **Sep 10, 2023**

Date of Peer Review: **Oct 05, 2023**

Date of Acceptance: **Nov 30, 2023**

Date of Publishing: **Jan 01, 2024**