

Content available at: <https://www.ipinnovative.com/open-access-journals>

Indian Journal of Forensic and Community Medicine

Journal homepage: <https://www.ijfcm.org/>

Original Research Article

Perspectives of medical faculty regarding implementation of Competency-Based Medical Education (CBME) in Uttarakhand, India

Bharti Baluni¹, Shiv Kumar Yadav^{1*}, Anupama Arya¹¹Dept. of Community Medicine, Government Doon Medical College, Dehradun, Uttarakhand, India

ARTICLE INFO

Article history:

Received 08-03-2024

Accepted 29-03-2024

Available online 04-04-2024

Keywords:

Faculty

Medical

Education

CBME

Perceptions

ABSTRACT

Background: Competency Based Medical Education (CBME) introduced in 2019, by the National Medical Commission Erstwhile Medical Council of India, involves restructuring the medical training and planning of curriculum and assessment with a focus on developing competent Indian Medical Graduates.

Objectives: To assess the perception of medical faculties towards the implementation of new Competency-Based Medical Education.

Materials and Methods: A cross-sectional study was conducted for 1 Month (July 2023). 42 Faculty Members were enrolled in the study after obtaining their informed consent. A pretested semi-structured questionnaire using Google Forms was used to assess the perception of faculty regarding CBME implementation. Data was entered using MS Excel. Statistical analysis was performed using Stata software (version 11.0, Stata, College Station, Texas).

Result: Out of 42 Faculty members, 16 were Professors and 26 were Associate Professor. The majority (97.6%) of faculty members were trained in medical education training through various workshops. The majority (69%) of faculty members agreed that CBME is essential as per changing time scenario. Although 81% of faculty members were not happy with frequent changes in regulations as released by NMC after the implementation of CBME. The majority (76%) of faculty members also shared that CBME changed their way of Teaching. Faculty members also unanimously shared that faculty and infrastructure recommended by NMC are less and there is a need to revise recommended requirements for effective implementation of CBME.

Conclusion: Faculty members unanimously agreed that Competency-Based Medical Education is very much-needed in India as per evolving and challenging healthcare needs across the globe. However, there is a need to revise (increase) recommended manpower, and infrastructure by NMC for the effective implementation of CBME.

This is an Open Access (OA) journal, and articles are distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprint@ipinnovative.com

1. Introduction

Medical Science is evolving day by day and so are challenges faced by medical professionals in providing health care services to society. The responsibility lies with the medical educator to train future medical professionals as per changing scenarios. With the same intent, the Graduate Medical Education Regulations (GMER), 2019

was implemented which was the first major revision of the medical curriculum since 1997. The most crucial advancement is the formulation of global competencies and subject-wise outcomes which define the roles of the "Indian Medical Graduate".^{1,2} National Medical Commission formulated CBME Guidelines 2023 which have been reformed as per the feedback, suggestions, and revisions required after the implementation of GMER 2019.^{2,3}

* Corresponding author.

E-mail address: docshivkumaryadav@gmail.com (S. K. Yadav).

CBME is a very thoughtful approach to developing physicians in their future practice and encourages better accountability and flexibility.^{4,5} The success of CBME depends on the presence of a supportive administration/management, and resources and requires proper planning, and supervision of the implementation process to ensure that intended objectives are met.^{6–8} The successful implementation of the CBME program essentially depends on the sensitization programs for all the faculty members and dedicated faculty members.^{7–9} At the same time, it was feared that the introduction of CBME will overcomplicate medical training, as competencies are divided into key competencies, which are then further divided into milestones.^{8,9} As a whole, it becomes quite exhaustive and impractical, as the process of setting descriptors, designing rubrics, and doing internal and external validation for each of the subject-specific evolutionary program-induction algorithms is difficult.^{8,9} To understand further various issues related to CBME implementation, this study is planned to explore the perspectives of medical faculty regarding implementation of Competency-Based Medical Education (CBME) in Uttarakhand.

2. Aims and Objectives

To assess the perception of medical faculties towards the implementation of new Competency-Based Medical Education.

3. Materials and Methods

A cross-sectional study was conducted for 1 Month (July 2023) at Government Doon Medical College Dehradun, Uttarakhand. 42 faculty members who were willing to participate in the study were enrolled in the study. Informed consent was taken from all participants. A pretested semi-structured questionnaire using Google Forms was used for data collection. Data was entered using MS Excel and statistical analyses were performed using Stata software (version 11.0, Stata, College Station, Texas).

4. Results

This study was conducted to explore the perspectives of medical faculty regarding the implementation of competency-based medical education in Uttarakhand. Out of 42 Faculty members, (Figure 1), 16 were Professors and 26 were Associate Professors, with teaching experience of more than 4 years.

The majority (97.6%) of faculty members have received Medical Education Training as per CBME. Medical education training increased their understanding of CBME and helped in the implementation of CBME in the college as seen in Figure 2.

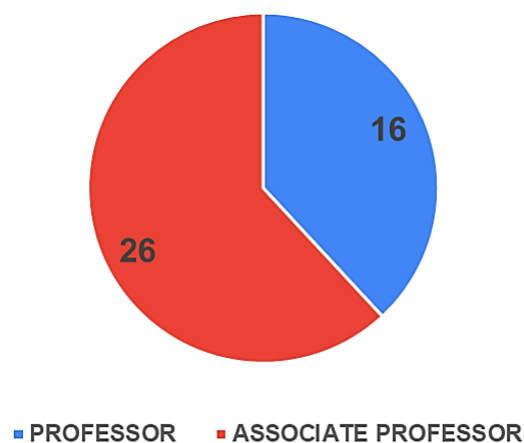


Figure 1: Designation of study participants (n=42)

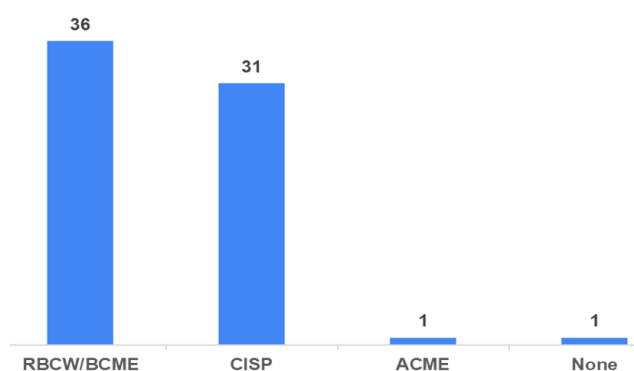


Figure 2: Status of medical education training received (N=42)

Faculty member's perception regarding the need for Competency-based Medical Education was explored and 69% of participants agreed that CBME is essential as per changing time scenario which emphasizes that CBME implementation by NMC was timely, appropriate, and much-needed as shown in Figure 3.

The majority (76%) of faculty members also shared that CBME changed their way of teaching. Faculty members expressed that CBME will make more competent Indian medical graduates. However, faculty members also documented that the infrastructure recommended for CBME implementation is less as CBME focuses on small group teaching and multiple assessments for which more faculty members are required for effective implementation shown in Figure 4.

The majority (93%) of faculty members were aware about recent updates about Competency Based Medical Education (CBME) and 69% documented that CBME syllabus is different from Pre-CBME Syllabus, although 81% of faculty members were not happy with frequent changes in regulations as released by NMC after the implementation of CBME as mentioned in Figure 5.

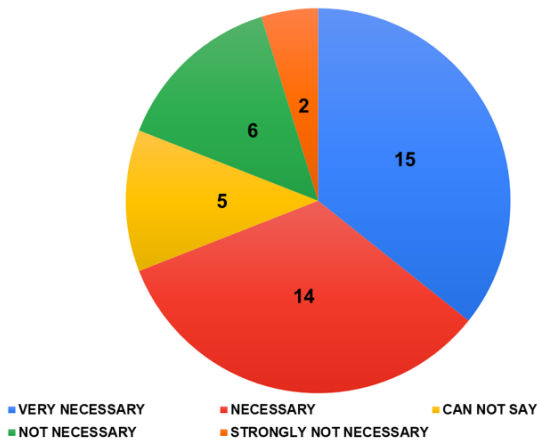


Figure 3: Necessity of CBME as per current scenario (N=42)

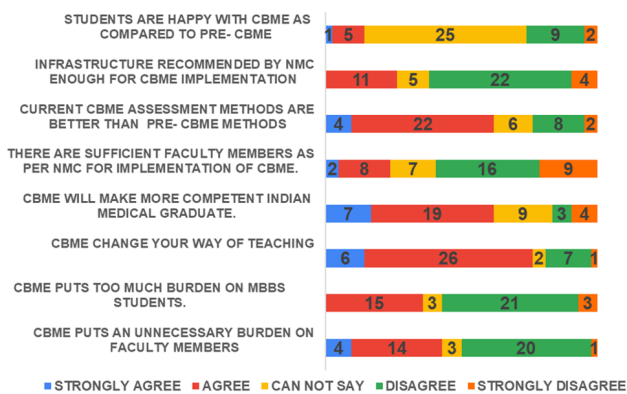


Figure 4: Perception of medical faculty regarding CBME (N=42)

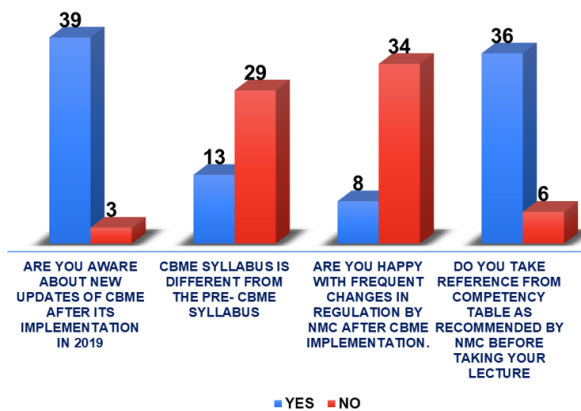


Figure 5: Opinion about CBSE implementation (N=42)

5. Discussion

In this study, the majority of participants were trained in various training viz Revised Basic Course Workshop (RBCW), Basic Course in Medical Education (BCME), and Curriculum Implementation Support Program (CISP) and only one faculty was trained in Advance Course in Medical Education (ACME). Trained Faculty Members are essential requirement for the effective implementation of CBME mentioned in a similar study by Mahajan R et al¹⁰ which emphasized that compared to untrained faculty, CISP-trained faculty & ACME trained faculty are more concerned about the impact of CBME on students, collaborating with colleagues for its proper implementation and exploring more benefits from the implementation of CBME.¹⁰

In the present study, the majority of faculty members expressed that recommended faculty members & infrastructure for implementation of CBME is less compared to required, which is similar to the finding of a study by Shrivastava SR¹¹ which documented that the lack of infrastructure support (such as skill laboratory or the presence of rooms for the conduction of small group teaching sessions or wifi availability), lack of administrative and faculty support, will significantly affect the acquisition of knowledge and learning skills.¹¹

6. Conclusion

Faculty members unanimously agreed that Competency-Based Medical Education is very much-needed in India as per evolving and challenging healthcare needs across the globe. However, there is a need to revise (increase) the recommended manpower who is trained in various courses needed for the implementation of CBME, and Strengthened infrastructure by NMC and by the institutions for the effective implementation of CBME.

7. Limitation of the Study

This study involved a small sample size and was conducted only in one institute, so the findings of the study cannot be generalized, although the findings of this study can be used to explore more about barriers perceived by faculty members in CBME implementation.

8. Source of Funding

None

9. Conflict of Interest


None

References

1. Regulation on Graduate Medical Education (Amendment, 2019) November 6, 2019 . Available from: https://mchsangli.bharativedyapeeth.edu/media/pdf/Regulations_on_Graduate_Medical_Education_200220.pdf.
2. Yadav SK. Recent reforms in competency-based medical education in India. *Indian J Forensic Community Med.* 2023;10(3):102–4.
3. Competency Based Medical Education Curriculum (CBME) Guidelines- National Medical Commission; 2023. Available from: <https://www.nmc.org.in/MCIRest/open/getDocument?path=/Documents/Public/Portal/LatestNews/CBME%201-8-2023.pdf>.
4. Ferguson PC, Caverzagie KJ, Nousiainen MT, Snell L. Changing the culture of medical training: An important step toward the implementation of competency-based medical education. *Med Teach.* 2017;39(6):599–602.
5. Kiguli-Malwadde E, Olapade-Olaopa EO, Kiguli S, Chen C, Sewankambo NK, Ogunniyi AO, et al. Competency-based medical education in two Sub-Saharan African medical schools. *Adv Med Educ Pract.* 2014;5:483–9.
6. 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):5–9.
7. Shrivastava SR, Shrivastava PS, Ramasamy J. Development of a module to successfully implement competency based medical education program in an institute. *Muller J Med Sci Res.* 2018;9(1):27–9.
8. Caverzagie KJ, Nousiainen MT, Ferguson PC, Cate OT, Ross S, Harris KA, et al. Overarching challenges to the implementation of competency-based medical education. *Med Teach.* 2017;39(6):588–93.
9. Hawkins RE, Welcher CM, Holmboe ES, Kirk LM, Norcini JJ, Simons KB, et al. Implementation of competency-based medical education: Are we addressing the concerns and challenges? *Med Educ.* 2015;49(11):1086–102.
10. Mahajan R, Virk A, Saiyad S, Kapoor A, Ciraj AM, Srivastava T, et al. Stages of Concern of Medical Faculty toward Adoption of Competency-based Medical Education in India: A Multicentric Survey. *Int J Appl Basic Med Res.* 2022;12(2):87–94.
11. Shrivastava SR, Shrivastava PS. Competency-based medical education for undergraduates in India: Strengths, weaknesses, opportunities, challenges analysis and the way forward. *Mustansiriya Med J.* 2020;19:37–9.

Author biography

Bharti Baluni, PG Resident

Shiv Kumar Yadav, Assistant Professor  <https://orcid.org/0000-0002-8615-817X>

Anupama Arya, Associate Professor

Cite this article: Baluni B, Yadav SK, Arya A. Perspectives of medical faculty regarding implementation of Competency-Based Medical Education (CBME) in Uttarakhand, India. *Indian J Forensic Community Med* 2024;11(1):19-22.