Copyright © Hazarika K. This is an open-access article distributed under the Creative Commons Attribution License permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

Editorial

Competency-based medical education for indian medical graduates: where do we stand?

Hazarika K

The competency-based medical education (CBME) is a tested teaching methodology implemented recently in India by the National Medical Commission (NMC) to fulfil the needs of the hour for better health care in the country. It invites lots of resistance from various sectors. Though the CBME is introduced, there are various challenges to meet for better outcomes of the course to produce competent Indian medical graduates (IMG) under defined guidelines from NMC. IMG is considered the first contact physician in the community to serve people with knowledge of ethics, skills, leadership quality, good communication, and a concept of lifelong learning. The main concern of lack of infrastructure, lack of adequate faculty development program (FDP), shortage of faculties for teaching as per guidelines, and logistics support for skill development for the student from the government and administration, etc. Despite all odds, NMC has implemented the CBME curriculum from 2019 in the country, especially in institutions with direct control. But there are many autonomous institutes where CBME is not considered yet and are following their curriculum, which is a concern. There is no doubt that the CBME will produce better IMGs who can compete globally and help the community with proper medical guidance and other healthcare stakeholders to implement adequate health facilities for the people.

Keywords: Competency; teaching-learning method; knowledge – skill-based; medical education.

Cite this article: Hazarika K. Competency-based medical education for Indian Medical Graduates: where do we stand? Int J Health Res Medico Leg Prae 2022 July-Dec;8(2):6-9. Doi: 10.31741/ijhrmlp.v8.i2.2022.1

The newly introduced CBME curriculum replaced the decades-old Indian traditional curriculum in 2019. The reform that the erstwhile Medical Council of India (MCI) and now the National Medical Commission (NMC) created started with some resistance from almost all quarters teachers, students, and even the administration. There was apprehension about the implementation process due to the lack of adequate training of the faculties and proper guidelines for the students and other stakeholders. The new CBME, however, is achieved after the initiative of faculty development and capacity building with the training of faculties in the basic course, advanced course, and Curriculum Implementation Support Program (CISP), and publishing of a draft outline for review in the public domain. As per CBME, 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 function appropriately and effectively as a physician of first contact of the community while being globally relevant", and this is considered that the new medical graduate coming out successful will be competent enough to perform these roles.²

Unlike traditional teaching, the introduction of an outcome-based and learner-oriented curriculum was followed in most medical schools worldwide. This competencies-based program started in the US (ACGME 2001), UK (GMC competency framework 1993), Scotland (Scottish Doctor), Canada (Can2Med), Australia, and Netherlands (National Undergraduate framework),^{2,4} are based on CBME. The American Council for Graduate Programme (ACGME) reported the achievement of the graduate landmark.³

In CBME, a learner is expected to learn a set of competencies related to multiple domains of knowledge, skills, attitudes, and communication within the social and cultural environment. The primary aims of CBME are to bring out the graduates' leadership qualities and other specific competencies. The goal for the IMG about global competencies is five roles: clinician, leader, communicator, lifelong learner, and professional. To achieve these, it is imperative to review the basic definition of competency, i.e.," habitual, consistent, and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflections in daily practice for the benefit of the individuals being served".4 Considering this definition, it is evident that competency-based education needs to focus on various areas other than knowledge and skills. It needs to be in a relatively consistent and habitual manner. The other areas are continuous monitoring, feedback, and self-directed learning, and of 35 global competencies and affect subjectspecific competencies that will lead to the professional development of students towards a competent IMG.2 Various studies and publications by different authors regarding the benefits of CBME are considered evolutionary educational thinking and a new medical program accreditation process in India.5

Individualized learning of students through Self-Directed Learning (SDL) and Small Group Discussion (SGD) through CBME will facilitate gathering competencies in each stage. Some introductory lectures before SGD may be better, though it may need to repeat some in phase III, those taught in phase I, or before clinics for better understanding. Students like to get more personal supervision and attention, mentorship and assessment, and remedies. The flexibility of the curriculum will provide development opportunities for oneself at the time of electives. The students will have the scope for preparedness for development and mastering professional skills independently, with guidance but without peer pressure.⁵ There is a shift from theoretical knowledge to practical orientation in CBME for students. There is a need for adequate and proper training of faculties as it is a new approach, and the scope of theoretical lectures is reduced to one-third of the yearold course. There is the introduction of small group learning, early clinical exposure, and active learning based on well-defined learning outcomes, which can be focused on the proper development of students in their competencies. The main aim is to change the direction of focus toward students rather than the teacher-oriented. Undoubtedly, the present goal of CBME is to produce a

medical graduate to fill the roles of clinician, leader, communicator, professional, and lifelong learner. The new regulations of 2019 are more learners—centric, patient-oriented, and in conformity with global trends. So, the teaching faculties must be trained accordingly so that the teachers become facilitators of learning rather than stage-orientated teachers and constantly stay with the learners. The curriculum's main concept is to produce a "first contact physician" so that they are competent enough to serve at the community level of health care with considerable knowledge in attitude, ethics, communication, and required skills.

Various tools for the assessment of IMG are formulated based on the MCIs guidelines. So an IMG must be assessed about their competencies as clinicians in the global context, and the MCI focused on the point: "clinician who understands and provides preventive, promotive, curative, palliative and holistic care with compassion."6 The role of the leader is also another essential part of the curriculum. The role of a communicator and developing the skill is also a need of the hour for the medical profession. This indicated that a graduate must possess the required verbal and non-verbal skills to express and develop a report with the attending patient and is the paramount importance to documented evidence for the patient compliance to treatment. This learning process will improve the doctorpatient relationship and reduce the chances of legal consequences against doctors. The MCI has documented the IMG should be a "communicator with patients, families, colleagues, and community.5 The IMG should be a lifelong learner, i.e., a whole life must be considered a scope of learning and practised. In the medical field, a new tool for diagnostic investigation and process of development and new concept or added kinds of literature are a continuous process for treatment, and medical graduates always require improvement and updating their knowledge MCI has documented these as a mandatory part of the learning. The IMG must possess the role of a professional, too, and should develop to build the basic trust of the public towards doctors. Medical graduates should be "professional who is committed to excellence, is ethical, responsive and accountable to patients, community and the profession." To assess all these competencies, the MCI has formulated various tools for the IMG.7

A critical aspect of the curriculum is students' feedback on their studies in the form of a logbook for each course in different timeframes and formative assessments, mainly followed by feedback. This is a commitment towards helping in the professional development of students by directly observing their academic performance and encouraging the students for their future performance. The changes are primarily in assessment, achieved with continuous feedback to the students. The main target is to know the knowledge and skills and gather the clinical reasoning, emotions, values, and reflections. The MCI has guided some specific areas for assessing subject-specific competencies for evaluation by the faculties. There are different ways of assessing the students, like multiple-choice questions (MCQs), short answer questions (SAQ), essaytype questions, objective structured clinical examination (OSCE), and objective structured practical examination (OSPE), which are introduced.

Let's look at the benefits of CBME. It is imperative to note that the course will bring out the better physician of tomorrow who is competent enough to move the shoulders of other medical graduates worldwide with comprehensive educational experience. ^{8.9} Individualized learning of competence-based education will ensure the best competencies in each stage of learning as there is more personalized supervision, mentorship, and frequent assessment and feedback. The flexibility of learning will provide the additional scope of learning and performing at their wish without any comparison to fellow learners.

There is also less peer pressure. CBME focused on operational skills with more emphasis on less theoretical knowledge. IMG will be able to master essential skills and will get an edge by preparing themselves for practice based on practical experience. As there is a change in approach to the curriculum, the faculties will also benefit from various training pieces. The teaching is based on well-directed learning outcomes, and they can focus on specific planned competencies of the students. There is a scope of balanced competency-based medical graduates who will be community-oriented and serve society with ethical, morally bound obligations and professionally equipped skills without any bargains and compromises. CBME is balanced to produce medical graduates with specific skills that serve the community's medical needs to reduce the gap between patients and doctors. Adding a foundation course is also an essential aspect of the course.

CHALLENGES

However, it needs some modification as the new generations of students are almost all computer savvy and need for a long duration of computer classes may be reconsidered. Moreover, by teaching a local or second language, students can learn their own as per their needs. The foundation course also includes Yoga and other sports activity classes for a short period which needs to be readdressed as this being a lifestyle-specific and individual concept is a part of their own life.

There are many challenges of the CBME course, starting from implementation to training of faculties as well. Faculty development is one of the significant challenges of the CBME, as they play a major role in successful implementation. There is a transition from traditional teaching to CBME.¹⁰ Regional centres, nodal centres, and the Medical Education Unit (MEU) of institutions are taking care of the Faculty Development Program (FDP). Though there are various FDPs, some faculties are still sceptical and reluctant. The uniform timetable for CBME is another major challenge. Now, most colleges are adopting their timetable as per their convenience, which cannot be denied as India is a vast country with different cultural and ethnic variations of festivals and other activities, too though there is a specific guideline from NMC. Merely adding competencies and other specific learning objectives cannot be achieved. To get a better outcome of CBME, effective teaching methods linked with problem-based and casebased learning are missing or not adequately adopted.⁴ The core integration approach, namely horizontal, vertical and spiral, is still in process. Again, uniform assessment methods for the entire country may be a dream only as most institutions lack adequately trained faculties in different stages. Another drawback of CBME is the lack of robust and reliable assessment strategies. ⁴ The question arises if so, many things are good with CBME, why are all the medical colleges across India not implementing it?³ No doubt there happen to be two different groups of IMG coming out near future, one from the NMC- controlled and the other from the autonomous group of institutes with their curriculum, which may be a concern for some. Initially, there were few autonomous institutes in India. Still, the increasing number of such institutes with enough admission capacity will create many medical graduates who are trained in different ways and will compete for the same academic and career concepts in the future. This need to be addressed in the proper platform as the government planned for a "One Nation One Policy" almost for all, and the medical graduates cannot

be spared. However, all are controlled directly or indirectly by the NMC.

CONCLUSION

The goal of CBME should be to consider getting expertise, not competence only. The concept of the new

CBME curriculum is encouraging. It will bring out the trained

graduates that meet the need of the patients in the community and other stakeholders in the Indian health care system. A systemic, collaborative approach and involvement of all the administrative, medical educators, faculties, students, and other policymakers will help implement CBME for a better IMG.

REFERENCES

- Competency-Based Undergraduate Curriculum. 2018. Medical Council of India. [cited 2022 Nov 1. 20]; Available from: https://www.mciindia.org/CMS/wp-content/uploads/2020/01/UG-Curriculum.pdf
- 2. Singh T, Saiyad S, Virk A, Kalra J, Mahajan R. Assessment toolbox for Indian medical graduate competencies. J Postgrad Med 2021;67:80-90 . Doi:10.4103/jpgm.JPGM_1260_20.
- 3. Subhendu Pandit, Merlin Thomas, A Banerjee, Mohan Angadi, Sushil Kumar, Aseem Tandon, et al. A crossover comparative study to assess the 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. [cited 2022 Nov 20]; Available from: URL:https:// pubmed.ncbi. nlm.nih.gov
- 4. Epstain RM, Hundert EM. Defining and assessing professional competence. JAMA 2002;287:226-
- 5. Rajashree R, Chandrashekar DM. Competency-based medical education in India: a work in progress. Indian J Physiol Pharmacol 2020;64(Suppl_1):S7-S9.
- Vander Vleuten CP. The assessment of professional competence: developments, research and practical 6. implications. Adv Health Sci Educ Theory Pract 1996;1:41-67.
- 7. Deswal BS, Singhal VK. Problems of medical education in India. International Journal of Community Medicine and Public Health 2016 Jul;3(7):1905-1909. Doi: 10.18203/2394-6040.ijcmph20162063.
- 8. 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:S5-9.
- 9. Ferguson PC, Caverzagie KJ, Nousiainen MT, Snell L, ICBME Collaborators. Changing the culture of medical training: an important step toward the implementation of competency-based medical education. Med Teach 2017;39:599-602.
- 10. Dath D, Iobst W. The importance of faculty development in the transition to competency-based medical education. Med Teach 2010;32:683-6

Address for correspondence: Prof. Karuna Hazarika

Principal cum Chief Superintendent, Tezpur Medical College, Tezpur, Assam, India E-mail: drkaruna97@gmail.com.

Mobile: +919864018665.