

Review Article

Faculty development programs for implementing competency based medical education in India: challenges and opportunities

Manjunatha S. Nagarala^{1*}, Revathi Devi M. L.²

¹Department of Community Medicine, ²Department of Physiology, Mysore Medical College, Mysore, Karnataka, India

Received: 03 November 2020

Revised: 22 December 2020

Accepted: 22 April 2021

*Correspondence:

Dr. Manjunatha S. Nagarala,
E-mail: drmanju.mmcric@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

India has rolled out competency based medical education which means a thorough overhaul of pedagogical and assessment methods. Several new components are introduced which require focussed faculty training and handholding at times. The erstwhile medical council of India had prepared a meticulous roadmap for this and dedicated faculty development programs were initiated for the smooth and effective transition into CBME. The possible challenges and gaps in faculty development are discussed with available options in this paper. To discharge their duties efficiently, the competencies for the faculty also need to be defined and they should progress from 'knows' level to 'does' level through longitudinal faculty development programs. The fidelity testing is the key for transfer of learning during FDP for the benefit of the students.

Keywords: Faculty development, Competency based medical education, Revised basic work shop, CISP workshop

INTRODUCTION

India has adopted outcome based medical education and has rolled out competency based medical education from the year 2019 with a goal of Indian medical graduate (IMG) as the output.¹ The delivery of CBME is guided by the well-articulated competencies sequenced progressively and acquired in workplace-based learning environments. Here teachers need to adopt deliberate approaches to offer learning experiences and workplace-based assessments with feedback and adopts the role of coach.² Despite these roles being pivotal, many clinical teachers feel unprepared for the tasks required for CBME implementation.³ Guidance is needed to ensure comprehensive and coherent programs of faculty development to meet the needs of teachers. A framework of teaching tasks is required for the faculty to track and reflect on their progress.⁴

The medical council of India has developed and implemented a well-structured faculty development

program in India. Though the history of faculty development in India is long with establishment of national teacher training centres (NTTC) as far back as 1974.⁵ It got teeth when MCI made it mandatory for all medical colleges to have Medical Education units/departments through its graduate medical education regulations in 1997.⁶ MCI went on to build a multitier architecture by setting up regional and nodal centres across India for training the faculty of medical education units who in turn will train faculty in their respective colleges.^{5,7} The basic level faculty training was named basic medical education technology workshop (MET) which had a three day intensive training format. Later this was renamed as revised basic medical education technology workshop (rBMET) with revised curriculum aligned to competency based medical education (CBME) which was in the pipe line to be rolled out. Then MCI conceived and introduced an advance course in medical education delivered through regional and nodal centres from 2014 onwards. The latest in the FDP is introduction

of curriculum implementation support program workshops (CISP) just before launching CBME in 2019.⁵

DISCUSSION

The revised basic medical education technology workshops and CISP workshops are cross sectional in nature without follow up. The trained faculty may not get opportunities to implement their learning in their routine teachings due to various reasons. Even if they practice, they may not get feedback from the colleagues or students as it is labour intensive and not an MCI mandate. So, in the absence of robust programme evaluation at institution level the skills acquired may evaporate over a period of time. More over the rBMET and CISP workshops help faculty to the 'knows' and 'knows how' and at the most 'shows how' level of miller pyramid and what we require is they should elevate themselves to 'does' level.⁸ If we can bring in a feedback mechanism for the faculty about their teaching repertoire it may enhance the reflection on the part of the faculty and in turn facilitate the implementation of CBME in a meaningful way. If faculty development programs are to have impact, we believe they should be made up of several self-reinforcing workshops that provide opportunities for behaviour review, practice, reflection, and reinforcement.^{2,4}

Now since the clarion call is given already and the tryst with future is in the hands of faculty, we need to be proactive in identifying the challenges early and embark on identifying best practices for faculty development in India. Anticipated barriers to implementation need to be identified and addressed out at the planning stage itself.⁹

Challenges

Quantitative

Training faculty in all medical colleges at the earliest to facilitate smooth operationalization of CBME.

Qualitative

Are the revised basic workshops and CISP workshops equipping the faculty in successful implementation of the CBME. The evidence to this question is not available yet but this is the question which needs to be answered at the earliest as faculty development programme is the cornerstone of CBME implementation.

We need to be cautious about the diffusion of innovation theory operating in the implementation of CBME as well.¹⁰ If we have to defy this as we want all medical colleges to adopt CBME not just in letter but in spirit also. We cannot afford to fail in this mission as CBME cannot be a metaphor. We want all medical colleges to be early adopters of CBME and the key determinant for that is robust faculty development.

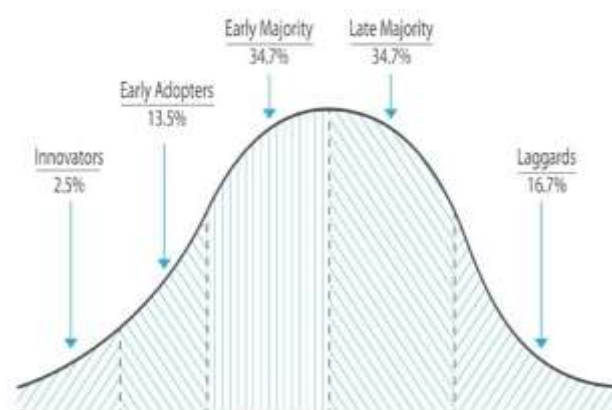


Figure 1: Diffusion of innovation theory in the implementation of CBME in India.¹⁰

Possible solutions

Coupling revised basic medical education technology workshop with CISP workshop and delivering it as a capsule. Integrated learning objectives can be developed for this purpose as there are many overlapping topics. This reduces tremendous administrative and managerial labour in organising two workshops.¹¹ More than that the integration helps in internalization of concepts by the faculty and avoids boredom and fatigue.

Making these workshops hybrid model with face to face and online components. The faculty will attend presentations online and resource material is shared in advance. They come for group work and presentations in face-to-face mode.

Following the workshops online refresher course modules can be delivered through nodal centres in liaison with organisations like NP-TEL.

Identifying list of competencies and entrust able professional activity (EPA) lists for faculty implementing CBME. The benefits of EPAs based FD programs are many like structured and planned training activities, assessment of competence level of faculty, assurance of transfer of training to the workplace and confident and motivated faculty.¹²

The faculty development programme can be made longitudinal by using tools like objective structured teaching encounters (OSTE) and establishing microteaching laboratories at medical colleges coordinated by medical education units and curriculum committees (CC). OSTE consists of a simulated teaching scenario involving a standardized learner with objective and immediate feedback given to the teacher, and includes a pre-determined behaviourally based scale or checklist to assess teaching performance.¹³ Microteaching is a "scaled-down teaching encounter designed to develop new skills and refine old ones."¹⁴

Giving more teeth to MEUs and CCs at the institutional level will help develop scholarship of teaching, which a key driver for success of CBME. Scholarship of teaching attributes includes continuous deep reflection, committed engagement in action, shared communication and critical enquiry-based approach, context-oriented, and learning focused.¹⁵ Incentivizing the academic leadership will help.

Identifying a critical mass of trained faculty who can involve in faculty exchange programs. The foreign faculty will observe the implementation of CBME in the host institution and share their views and experiences and will offer training in specific areas if required. This cooperative and collaborative approach will yield better dividends. It is imperative that we pay heed to African proverb: "If you want to go fast, you go alone. If you want to go far, you go together."

Assessing the readiness and motivation levels of faculty for implementing the CBME using tools like MORC questionnaire. It can also identify which elements in a change process require special attention so as to increase the chance of successful implementation. Apart from finding out the faculty's readiness for change and the areas that need focus, this can also be a sensitization instrument for the faculty about the impending curricular reform.¹⁶

Creating a faculty development wing in all health universities which will liaise with the concerned nodal or regional centre for faculty development

National faculty development strategy for medical teachers for catering to the desired objectives in the context of CBME.¹⁷

FDP evaluation using Kirkpatrick's or other tools for course corrections and revisions whenever necessary.^{18,19}

Fostering action research in faculty development at various levels. Recognising research publications in medical education for promotional purpose.

CONCLUSION

Faculty development is critical to successful implementation of CBME. Building a faculty development (FD) program can be a challenging yet exhilarating experience for health professions educators and administrators. A systematic approach that is based on theoretical assumptions, components of CBME, adult learning principles, clear goals and objectives, an explicit design strategy and programmatic evaluation, can help to overcome the many challenges inherent to implementing a FD program. Having a longitudinal programme, instead of a cross sectional bolus will be more impactful. Direct observation of teaching and giving feedback will help in true acquisition of teaching competencies and the faculty

can appreciate their own progress from novice level to expert level in implementing different components of CBME.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

1. Medical Council of India. Competency Based Undergraduate Curriculum. Medical Council of India; 2018. Available at: <https://www.mciindia.org/CMS/information-desk/for-colleges/ug-curriculum>. Accessed on 2020 Oct 10.
2. Walsh A, Koppula S, Antao V, Bethune C, Cameron S, Cavett T et al. Preparing teachers for competency-based medical education: Fundamental teaching activities. *Med Teach*. 2018;40(1):80-85.
3. Gelula MH, Yudkowsky R. Microteaching and standardized students support faculty development for clinical teaching. *Acad Med*. 2002;77(9):941.
4. Sirianni G, Takahashi SG, Myers J. Taking stock of what is known about faculty development in competency-based medical education: A scoping review paper. *Medi Teacher*. 2020;42:8:909-15.
5. Zodpey S, Sharma A, Zahiruddin QS, Gaidhane A, Shrikhande S. Faculty development programs for medical teachers in India. *J Adv Med Educ Prof*. 2016;4(2):97-101.
6. Medical Council of India. Regulations on Graduate Medical Education, 1997; May, 2018. Available at: <https://www.mciindia.org/CMS/rules-regulations/graduate-medical-education-regulations-1997>. Accessed on 2019 May 25.
7. Medical Council of India. Curriculum Implementation Support Program of the Competency Based Undergraduate Medical Education Curriculum. New Delhi: Medical Council of India. 2019.
8. Miller GE. The assessment of clinical skills/competence/performance. *Acad Med*. 1990;65(9):s63-7.
9. Payal B, Avinash S, Soumendra S. Faculty development for competency based medical education. *Natl J Integr Res Med*. 2017;8(5):89-95.
10. Dearing JW, Jeffrey JC. Diffusion of Innovations Theory, Principles and Practice. *Health Affairs*. 2018;37:183-90.
11. Ghosh A, Bir A. Need of evolution in mci teacher's training programs: faculty perceptions of a tertiary care medical college in India. *J Evid Based Med Healthc*. 2020;7(23):1113-8.
12. Iqbal MZ, Al-Eraky MM. Using entrustable professional activities (EPAs) to assess teaching competence and transfer of training: A personal view. *Medi Teacher*. 2019;41:1:107-8.
13. Boillat M, Bethune C, Ohle E, Razack S, Steiner Y. Twelve tips for using the Objective Structured

- Teaching Exercise for faculty development. *Medi Teacher*. 2012;34:4:269-73.
14. Heyorth R. Microteaching: a bilingual approach. *CUHK Educ J*. 1981;9(2):45-56.
 15. Mirhosseini F, Mehrdad N, Bigdel. Exploring the concept of scholarship of teaching and learning (SoTL): Concept analysis. *Med J Islam Repub Iran*. 2018;32(96).
 16. Jippes, Driessen M, Broers E, Majoor N, Gijsselaers G, Van der Vleuten W et al. A Medical School's Organizational Readiness for Curriculum Change (MORC). *Academic med j Asso Am Med Colleges*. 2013;88(10):1097.
 17. Government of India. Delhi: National Knowledge Commission. Available at: http://www.knowledgecommission.gov.in/downloads/documents/wg_med.pdf. Accessed on 2020 May, 15.
 18. Balandin SA, Sigafoos S, Reed J, Vicki. The Kirkpatrick model: A useful tool for evaluating training outcomes. *J intellectual develop disability*. 2009;34:266-74.
 19. Van Melle E, Frank JR, Homboe ES, Dagnone D, Stockley D, Sherbino J. A core components framework for evaluating implementation of competency based medical education programs. *Acad Med*. 2019;94(7):1002-9.

Cite this article as: Nagarala MS, Devi RML. Faculty development programs for implementing competency based medical education in India: challenges and opportunities. *Int J Community Med Public Health* 2021;8:3163-6.