



## Editorial

# Competency based medical education

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Change is the only thing constant in life. Greek philosopher Heraclitus summed up the philosophy wonderfully in this single line. Most of his writings have been reduced to fragments but whatever remains give us an awakening to facts of life:

Everything changes and nothing remains still; and you cannot step twice into the same stream.

So also, the field of medical education. The old timers perhaps were content with the conventional way of imparting medical education, but some teachers also felt the need to change the goals of medical education so that at the end of the education the medical graduate is competent in all ways to meet the societal needs.

Competency based medical education (CBME) was first mentioned by Mc Ghahie in 1978. In 2001 the Accreditation Council for Graduate medical Education (AGCME) initiated the Outcome project where stress was laid on imparting competencies during the period of training as “educational outcome”. Some more countries followed suit. Medical curriculum in these countries was now defined by the competencies identified. With the advent of CBME many definitions came up for “competency”. While each definition that we come across makes our concepts clearer, the simplest one would be the abilities that a health professional possesses that are observable. With competency is associated the word competence. Competence is a broader term and can be viewed as a

collection of competencies. Frank et al in 2010 gave the definition of CBME as “an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from analysis of societal and patient needs.” Each country has identified the competencies required for its medical graduate based on their societal needs. AGCME has identified six domains, while UK has three and the Canadian Medical Education for specialties has outlined seven. The Dreyfus model and the Miller’s pyramid have been the guidelines and pillars for planning and designing the skills and the assessment world over

The National Medical Mission in India rolled out the “Competency Based Undergraduate Curriculum for the Indian Medical Graduate” from 2019 onwards. The competencies expected of the Indian Medical Graduate are five in number : that of clinician, communicator, leader and a team member, lifelong learner and a professional. The curriculum has 412 topics and 2,949 competencies to be mastered. Newer teaching learning methods and assessments have been introduced. The way a competency is achieved is important and a time restrained older way of teaching has given way to time - independent but focused outcome based way of learning. The foundation course (FC), early clinical exposure(ECE) attitudes ,ethics, and communication(AETCOM) elective postings(EP), alignment and integration, clinical clerkships have been introduced.

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While most countries have a more or less single language for imparting education, India differs in that the medical aspirants come from varied backgrounds and the language in which they have studied also differs. They also are much younger at the time of admissions to a medical college. The FC helps them to orient themselves to the new professional environment. The ECE is aimed at providing the students in the first year a feel of the hospital before they study the clinical subjects; this would help them to understand the importance of the pre and paraclinical subjects. They would also understand the importance of the AETCOM components of professionalism empathy communication and ethics. Students who discover that they are interested in a particular subject (discipline) can test out their interests by opting to spend extra time in those subjects during the elective postings (EP). The curriculum has not defined the time variability for achieving the competencies. As far as my knowledge goes the course duration is still four and a half years before the internship. So if the learning pace of a student varies, how long is he/she stuck at a particular level what does the teacher do ?

Once competencies are defined, the next step was planning the teaching -learning methods, followed by assessments methods. The traditional way had didactic lectures as the mainstay of teaching with the assessment being mostly recall of the knowledge taught. Newer methods are required to make sure that the medical graduate acquires the defined skills. In a nutshell these could be enumerated as case based learning (CBL) problem based learning (PBL) clinical audits clinicopathological conferences(CPC) early clinical exposures (ECE), use of skill labs ,flipped classroom, integrated teachings etc. E-learning tools could also be used as an adjunct to teaching competencies. Though description of each T-L methods is beyond the scope here I would just like to add that where ever possible the integrated teaching should have

the involvement of the Department of Psychiatry for a small session on any aspect of the AETCOM module. Most integrated teaching sessions have ignored this important aspect of clinical teaching.

Assessments were summative in the traditional way, while CBME has formative assessment as its backbone. The Dreyfus model of skill acquisition takes the learner through being a novice, advanced beginner, competent, proficient to finally an expert. Assessments too need to be aligned to the stage of the learner. It requires observable and measurable elements. These need to be continuous. there should be a minimum standard. Thus in a CBME grades are not important as trying to achieve the level of competency. Work place based assessment with judgement and feedback from experts help the learner to acquire skills. Multiple tools like Mini clinical evaluation, direct observed procedures, logbooks, portfolios may be used to assess the competency.

With every change surface new challenges. The biggest challenge has been to have a faculty to carry out the CBME. Sensitizing and training the faculty is the need of the hour. The National Medical Mission has a well structured faculty development program for medical teachers. In short every teacher undergoes the Revised Basic Course, Advanced course in Medical education and the Curriculum Implementation support program (CISP).

While challenges will keep surfacing the Medical Teacher Fraternity will be the pillars shouldering the responsibility of succeeding in the Competency based Medical education change.

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