

Competency-based Medical Education – An Ophthalmologist’s Perspective

Dear Editor,

The year 2019 has been an important landmark in the history of Indian medical education. It marks the launch of the “Competency-Based Medical Education,” an outcome-based curriculum for MBBS students by the Medical Council of India. The purpose of the new curriculum is to train an Indian Medical Graduate (IMG) with the requisite knowledge, psychomotor skills, and an attitude to serve the community as the physician of the first contact. A competency-based curriculum is an outcome-based approach that focuses on enriching the desired and observable ability of an IMG. The curriculum is expected to equip an IMG to perform the role of a clinician, professional, leader, communicator, and lifelong learner.

All topics under each subject have been arranged as sub-competencies. For each of these sub-competencies domain of learning, proficiency, or level of expected learning, suggested teaching-learning methods and assessment have been clearly defined.^[1] The authors feel that an ophthalmology teacher would find this kind of stratification helpful to provide a direction to learning and understanding ophthalmology as a surgical subject. In a study in the Middle East, it was found that only 5.6% of undergraduate and resident students wanted to take up ophthalmology as a career specialty. The main reason for not opting for ophthalmology was increased use of instrumentation in the field.^[2] In another study conducted in 2018 in New York, it was found that more than half of the students were not comfortable diagnosing eye-related emergencies, using a direct ophthalmoscope, and testing visual acuity.^[3] The skill assessment of the new curriculum includes basic eye examination techniques such as visual acuity testing, digital tonometry, direct ophthalmoscopy, epilation, eye irrigation, instilling eye medication, and ocular bandaging,

which familiarizes the students with these kinds of tests and procedures.^[4] These skills are grouped as I (independently performed on patients), O (observed in the patients or on simulations), and D (demonstration on patients). It is mandatory, as a part of the curriculum’s skill module, to be able to perform these tests/procedures. Various commonly encountered situations are listed as a skill-based competency in the curriculum, which surely is a welcome change.

The competencies have been grouped into nine large competencies addressing each topic in ophthalmology – visual acuity assessment, lids and adnexa, orbit, conjunctiva, cornea, sclera, iris, and anterior chamber, lens, retina and optic nerve, and a group of miscellaneous topics.^[5] There is a clear delineation of topics with each specific learning objective (SLO), as to which of them need to be taught in the form of a lecture, small group discussion, bedside clinic, or a demonstrable session, or a combination of these. This way, it becomes very standardized and uniform. Furthermore, some SLOs encourage the students to be a part of a major procedure-like cataract surgery. This helps in learning specific etiquette related to operation theatres, as the standards of disinfection are higher for an intraocular procedure. There is an SLO that involves students in counseling pre-surgery patients. As a result, the student is being prepared to develop an attitude of empathy and also communication skills. The authors feel that there are only two SLOs dedicated to Glaucoma in the new curriculum, as Glaucoma is now emerging as a specialty in itself. Furthermore, we feel some important developmental anomalies and dystrophies have not been mentioned in the curriculum.

The topic of ophthalmology has been well connected with other subjects through horizontal and vertical

integration. Although we find that the specialty of ophthalmology has not been mentioned in AETCOM^[1] or electives,^[6] the authors feel that it can be a novel idea of the teacher's choice to include one or two modules in the aforementioned sections.

The regulations on graduate medical education were published in 1997 which provided guidelines for undergraduate education.^[7] They have undergone a series of amendments till 2017. The objectives outlined for undergraduate students are in the form of knowledge of various aspects of ophthalmology, acquisition of skills, and have shed some light on the need for an integrated approach. Due to the clarity provided in the new curriculum, the lines drawn in these aspects in the previous curriculum seem blur now. The older curriculum did not advocate teaching based on the lines of competency or outcome and focused on the acquisition of knowledge than skill enhancements and the ability to put the learning into practice. The two curricula also differ in terms of assessment: The traditional assessments emphasized more on knowledge than the acquisition of skills. However, the newer curriculum focusses on an outcome-based approach, which lets the learner know clearly what is expected from him at the end of each phase of training. More focus has been given to formative assessment coupled with constructive and effective feedback to identify learning difficulties and provide remediation in time. Furthermore, summative assessment is expected to assess not only recall but also different levels of knowledge and skills.^[8]

To summarize, the authors feel, the future introduction of the new curriculum for undergraduate ophthalmology in the year 2021 is a welcome and a necessary change after a long gap of 22 years and 4 months, to bring about a positive perception of an undergraduate toward learning and advocating knowledge gained and hands-on experience learned through this process, and thus, appreciate ophthalmology is various aspects of their clinical practice.

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