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Best of Both Worlds: Strategic Integration of Objective Structured Clinical Examination and Entrustable Professional Activities in Indian Medical Education

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ABSTRACT

The Objective Structured Clinical Examination (OSCE) has been incorporated into the Indian Competency-Based Medical Education (CBME) framework. However, key issues remain with the high-quality implementation of the OSCE-style assessment in undergraduate university examinations, as opposed to postgraduate examinations. The integration of workplace-based assessment with Entrustable Professional Activities (EPAs) within a competency-based framework marks the next stage in the development of competency and training assessments. EPAs are useful for bridging the gap between medical training and clinical practice, enabling trainees to apply their proficiencies while empowering them through autonomy in safe patient management. A balanced competency- and workplace-based approach may also help address logistical challenges and fill the gaps associated with OSCEs. It charts the path ahead for the dynamic assessment of attributes, such as professionalism and workplace communication, thereby adding flexibility to the training and evaluation process. Faculty development incorporating adaptive instructional delivery would help strategise for long-term success and achieve holistic real-time evaluation.

Keywords: *Entrustable professional activity, Objective structured clinical examination, Medical education, Workplace-based assessment, Teaching-learning tools, Competency-based medical education*

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INTRODUCTION

The Objective Structured Clinical Examination (OSCE), introduced in 1975 by Harden et al., is a popular assessment format globally and has been used extensively in India over the last decade (1, 2). The implementation of innovative teaching–learning (T–L) and assessment tools to improve the quality of medical training has been a hallmark of the Indian medical education system. This has led Indian medical educators to move away from didactic

teaching methods and align with the goals of the competency-based framework (3, 4). Thus, the OSCE has been integrated into undergraduate and postgraduate practical examinations as mandated by the National Medical Commission (5, 6). While several departments have successfully integrated OSCEs into their university exams, ensuring the implementation of high-quality assessments across all specialities is the need of the hour (7–9).

It is well established that the key to effective education and training is the integration of summative assessment (assessment of learning) and formative assessment (assessment as learning). The use of a balanced approach ensures that training objectives are met while continuously tracking candidates' progress to remain aligned with state standards (10).

On the one hand, the OSCE—as an assessment of learning (summative) conducted in a high-fidelity context as an exit exam—provides examiners with an opportunity to observe trainees' performance as clinicians in realistic situations. Simulation-based interactive resuscitation OSCE stations form the core of postgraduate OSCEs, particularly in acute care specialities. OSCEs are distinct from spotters, as they go beyond testing memorised facts and technical skills; they evaluate personal traits, such as rational thinking, situational awareness, team dynamics, and clinical acumen. Additionally, OSCEs assess candidates' endurance and ability to handle stress (11).

On the other hand, the OSCE, in itself an assessment as learning (formative), serves as a powerful teaching methodology. It encompasses primary domains of learning—cognitive, psychomotor and affective—which are fundamental to grooming well-rounded clinicians. Medical educators can use the OSCE from the early stages of training to deliver practice sessions, identify learning gaps and at-risk behaviours and adjust instruction accordingly; this approach helps strengthen clinical concepts through an immersive learning environment and reflective debriefing (12).

KEY CHALLENGES OF THE OSCE

Kundra et al.'s (4) review article noted that a lack of awareness and resistance to change are the major reasons why T-L and assessment techniques fall short of meeting objectives. These issues are evident at all levels of the hierarchical medical system. Since teachers and trainers are content with conventional T-L tools, and seasoned examiners are well-versed in existing assessment formats, this complacency has become a potential barrier to adopting newer methods. Criticism of the OSCE at the undergraduate level mainly stems from logistical issues, such as time constraints, examiner availability, and the resources required to assess a large number of candidates (e.g., 200–250 students) per exam sitting (13–15).

BRIDGING LEARNING AND PRACTICE

Workplace-Based Teaching and Evaluation

In India, the OSCE is not currently used solely as an exit examination to certify competencies for advancing candidates to the next stage of training. The blended approach of integrating it with other assessment tools enhances competency certification by increasing professional authenticity, as noted by Miller (16). However, because the OSCE can lead to compartmentalisation (15), combining it with workplace-based assessment (WBA) may offer greater flexibility in the T-L and evaluation process. Strengthening WBA and e-portfolio

record-keeping may therefore be worthwhile in the Indian context (4). Outcome-oriented education is demanding, and advancing the WBA framework to elaborate entrustable professional activities (EPAs) could enhance credibility (17–19). In line with this, the implementation of EPAs in India is gradually taking shape. Specialities, such as paediatrics, emergency medicine and psychiatry, have embraced this as an opportunity for robust curricular development in integrating the EPA framework into the assessment system (20). The Indian Psychiatry Society has recognised the paramount significance of attitude and skills in psychiatry training, leading to greater emphasis on clinical exposure for medical undergraduates, rather than theoretical classes. EPAs tailored to assess clinical psychiatry skills were developed. For example, the attitude, ethics and communication attributes of learners can be effectively evaluated using the Conduct Mental Status Examination EPA, which assesses key skills in psychiatry (21). Moreover, 360-degree feedback serves as a valuable tool for assessing a candidate's ethics and professionalism with patients and colleagues at the workplace (4, 22).

The EPA: Upscaling WBA from Supervision to Independence

An EPA is “a unit of professional practice that can be fully entrusted to a trainee, once he or she has demonstrated the necessary competence to execute this activity unsupervised”. While skills, competencies and knowledge are attributes of an individual, an EPA is a ‘job to be done or performed’ with a defined start and endpoint, assessed at the workplace (17). It allows personalised guidance and scope for improvement in a sequential and programmatic manner. It is defined in terms of the level of supervision required, motivating learners to progress from direct to indirect supervision and ultimately to remote supervision (23). Like OSCEs, EPAs assess not only attitudes but also trainees’ practical experiences in specific areas or specialities. However, EPAs have the added advantage of evaluating candidates at higher fidelity than OSCEs do, as they are performed in real time in the workplace (24, 25).

EPAs in Action: A Student-Centred Perspective

As a marker of entrustability for independent practice, EPA levels serve as a criterion for awarding certification upon completion of a specific stage of training and of the entire speciality training. This strategy links the workplace-based approach to OSCE competency testing, thereby strengthening medical education (24, 25). It also eliminates certain assessment formats, reducing the time allotted to other evaluation tools during practical examinations and addressing time management issues (26). From the students’ standpoint, EPAs guide supervisors in providing focused training inputs. These activities increase trainees’ understanding of the importance of honing their clinical skills rather than merely reading and learning (27). By encouraging learners to identify their own learning gaps, EPAs promote active learning through self-reflection. However, Park et al. (28) found in a needs assessment survey that a majority of students had significant knowledge gaps regarding EPAs. Common concerns included excessive workload, inadequate training for assessors, and challenges with using the EPA assessment platform.

INNOVATING FOR TOMORROW: IMPLEMENTATION OF EPA IN INDIA

Medical educators across various institutes in India recognise not only the value-added potential of OSCEs and EPAs but also the considerable effort required to overcome the challenges of developing and deploying them seamlessly within the Indian medical education

system. Faculty-oriented programmes can help develop affective skills, reinforce lifelong learning and aid trainers in adapting their teaching strategies to align with trainees' updated learning outcomes (29–31). Likewise, Shrivastava et al. (32) highlighted the importance of peer mentoring to support less experienced faculty members and promote standardised EPA implementation.

To meet the demands of a constantly evolving healthcare system, OSCEs and EPAs must adapt in tandem to remain aligned with realistic medical practice. Innovative OSCEs using virtual reality or computers could address this issue and also serve as a potential solution to the challenge of OSCEs being labour-intensive for organisers (14). Furthermore, setting aside protected teaching hours without compromising clinical duties helps maintain a balance between patient care and education, thereby reducing the risk of burnout.

To address evolving demands, the Mahatma Gandhi Medical College and Research Institute, Sri Balaji Vidyapeeth (SBV) University, Puducherry, India, has made significant efforts to attain greater transparency in formative assessment. SBV's upgraded competency-based learning and training (CoBaLT[®]) model for its postgraduate curriculum ventures beyond Dreyfus-based EPA grading, which is mainly based on subjective faculty observations and primarily assesses skills. For greater precision, SBV integrated National Medical Commission guidelines and the Accreditation Council for Graduate Medical Education's six-domain competency framework. EPA milestones were redefined and mapped to programme outcomes and subcompetencies. E-portfolios, workplace-based tests, descriptive rubrics, feedback, mentoring and self-evaluation all promote transparent evaluation (33). Similarly, the Department of Sports Medicine at the Armed Forces Medical College, Pune, India, has proposed a structured model incorporating defined milestones and EPAs within the CBME framework to enhance training uniformity (34).

CONCLUSION

India has taken a progressive approach by adopting CBME and by the timely introduction of novel T-L and assessment tools. When integrated into a competency-based framework, an enhanced WBA strategy, such as EPAs, can strengthen the authenticity of the medical training pathway. Administrative streamlining, resolution of managerial and workload challenges, and structured faculty development workshops could help move policy-level discussions to real-world execution.

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