



## **A Short Note on Objective Structured Clinical Examination (OSCE)**

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### **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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**Short Communication**

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### **ABSTRACT**

Objective Structured Clinical Examination (OSCE) is a structured competency based examination popularly used in examining the Medical and Nursing students. The clinical competence is evaluated by a team of examiners through uniformly timed, multiple stations. OSCE as an evaluation tool is gaining importance and it is becoming very popularly used by examiners all over the world as it is standardised and multiple observations and skills can be assessed equally for all the students in a single preparation. OSCE with its advantages like objectivity, tailored stations, safety of the patients and provision of audit and recording of the entire process has made it the most needed assessment of the skill component in most of the professional programmes concerning medical and nursing students.

*Keywords: OSCE; traditional viva voce; formative assessment; skill development.*

### **1. INTRODUCTION**

Objective structured clinical evaluation is a modern type of clinical/ performance based

evaluation where examination of the students is performed objectively. The execution of this is done in a planned manner and it is always structured and meticulous care is taken to

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maintain the objectivity during evaluation. It is considered as a gold standard for evaluation and it is a universal format to assess the clinical competence of all those students who learn clinical skills in their courses [1-6]. The clinical competence is evaluated by a team of examiners through uniformly timed, multiple stations.

OSCE is an examining process made up of equal length stations in a circuit. It was first described by Harden in 1975. The problems associated with traditional methods of evaluation can be eliminated and tackled through the introduction of OSCE [7]. It is different from the traditional viva voce which mainly assesses the theoretical knowledge and it is much of an evaluation of the candidate's intellectual abilities whereas OSCE is a pure practical test which assesses skill and the application of knowledge and reasoning for any professional course subject involving skill component. It is a complex, resourceful time intensive assessment [8].

OSCE as an evaluation tool is gaining importance and it is becoming very popularly used by examiners all over the world as it is standardised and multiple observations and skills can be assessed equally for all the students in a single preparation. It is difficult for the teachers to prepare the content and stations but once set it is the best evaluation technique adopted by millions of teachers. It is widely used in Medical, Nursing, physiotherapy and allied health professions. It has grown as a means of episodic performance based assessment because it has demonstrated high reliability and validity over traditional examinations [9]. A research study among the students and examiners was conducted and the results of the study are as follows: The majority of the students provided positive views regarding the attributes (eg, fairness, administration, structure, sequence, and coverage of knowledge/clinical skills), quality (eg, awareness, instructions, tasks, and sequence of stations),

validity and reliability (eg, true measure of essential clinical skills, standardized, practical and useful experiences), and organization (eg, orientation, timetable, announcements and quality of examination rooms) of the OSCE. Similarly, majority of the examiners expressed their satisfaction with organization, administration and process of OSCE.

The OSCE was perceived very positively and welcomed by both the students and examiners. The concerns and challenges regarding OSCE can be overcome through better orientation of the faculty and preparation of the students for the OSCE. [10]

#### Main characteristics of OSCE

- Short stations
- Focussed examination
- Assessment of performance
- Clinical competence is emphasized

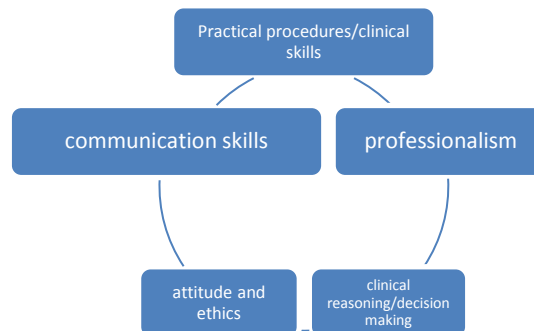
#### Significance of OSCE:[11]

- Helps in the assessment of the learners progress
- Specific learning outcomes are strengthened and encouraged
- Course of delivery is evaluated [12,13]
- Formative assessment
- Summative assessment

#### Golden standards for performance [14,15]

1. Valid
2. Feasible
3. Fair
4. Reliable
5. Flexible
6. Cost effective
7. Feedback ensured

#### Features assessed in OSCE [16,5]



### **Roles and responsibilities of an Examiner:**

Single examiner/Station.

#### **Before OSCE:[1,17]**

- Preparation of OSCE blue print
- Designing of individual stations
- Briefing of the students, examiners and if any simulated patients used.
- Equip the stations properly
- Arrange the stations where video recording is possible

#### **During OSCE:[1,4]**

- Greet the examinee and check the registration no/roll no
- Create a safe and congenial environment
- Observe the examinee
- Complete the marking on the check list/rating scale
- Give appropriate comments on the scoring sheet regarding the students performance
- Time management
- Ensure that the examinee moves to the next station on the time signal
- Maintain record of any problem that may arise

#### **After OSCE [3]**

- Give general feedback to the students
- Give individualized feedback with scoring sheet
- View the video recording
- Address the concerns of the students
- Meet the other examiners
- Submit the scoring sheet

On the day of examination OSCE lead should be present one hour before the start of the exams and check if everything is arranged appropriately. The Examiners and students should be present 30 minutes before the exam. The Examiners are briefed by the lead. A time keeper should be fixed who regulates the time. A bell is started to notify the start and finish. The students doing the first round should not be allowed to meet the students who are waiting to take the test. A separate in and out entrance should be maintained.

Feedback is very important as it helps to clarify doubts and it also helps the students to understand their level of performance better. This in turn will help in improving their performance better in the future. Both individual and group feedback is important. Feedback plays an important role in enhancing the process of learning. Discuss both the strength and weakness of the students. The feedback should be focussed on domain wise skills.

In another study, student valued OSCE as a good assessment method. The results of the study showed that OSCE is an effective method of assessing the knowledge, attitude and skill of a medical student, and OSCE can be implemented as a method of evaluation in the formative as well as summative assessment. OSCEs can be integrated within a curriculum along with other evaluation methods like long and short case discussion to provide more objectivity. However, this being a new method, these students need careful instructions and support before conducting OSCE to eliminate fear/ anxiety.

The major components of OSCE are:[2,18]

1. Examination coordination committee
2. The main lead
3. Other additional examiners
4. Examinees
5. Scoring sheet and criteria
6. List of skill, behaviours and attitude to be assessed
7. Examination stations
8. Couplet stations
9. Examination station circuit
10. Anatomic models

**Evaluation of OSCE:** It is very important to evaluate OSCE in terms of its validity and reliability at regular intervals.[19]

## **2. RESULTS AND DISCUSSION**

It has been proved through various studies that the use of OSCE has increased in the recent years and the objectivity of the assessment has made it the most desirable form by both the students and teachers to assess the skill and knowledge component and also the communication skill of the professionals.

### 3. CONCLUSION

The OSCE style of upcoming assessment for medical and nursing student's knowledge and skill component, in terms of its objectivity shows superiority over the traditional clinical assessment. The marking scheme for the OSCE is decided and objectively designed to avoid bias and confusion. The stations and tasks to be assessed are tailored according to the course and the level of the students to be assessed. OSCE with its advantages like objectivity, tailored stations, safety of the patients and provision of audit and recording of the entire process has made it the most needed assessment of the skill component in most of the professional programmes concerning medical and nursing students.

### CONSENT

It is not applicable.

### ETHICAL APPROVAL

It is not applicable.

### COMPETING INTERESTS

Author has declared that no competing interests exist.

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