



## Students' Perspective About Objectively Structured Clinical Examination (OSCE)

### KEYWORDS

affective skills, cognitive skills, objectively structured clinical examination (OSCE), psychomotor skills.

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**ABSTRACT** OSCE is an innovative system for practical exams and is both objectively structured and evaluates all 3 domains of learning namely, cognitive, affective & psychomotor.

*Materials & methods:* 100 undergraduate students from 9th semester MBBS were included in this study. First conventional way of examination was conducted. Later on all students were asked to give the OSCE examination. Feedback forms were obtained from students at the end of each examination. Comparison between both patterns was done based on the students' feedback.

*Results:* OSCE was found to be more objective, well structured & also addressed all 3 domains of learning namely, cognitive, affective & psychomotor.

*Conclusion:* OSCE is a well structured, objective & also an innovative way of examination as it was obtained through feedback from the students and hence students perspective for OSCE was totally positive.

### INTRODUCTION:

OSCE is an innovative system and modern way of clinical assessment. OSCE means objectively structured clinical examination. In traditional way of assessment we do not have uniformity. Natural human tendency is to listen carefully to initial students and wind up the exam for the students in last section. This does not allow assessment of the student uniformly. Students may miss a chance to tell what he/she knows. He/she may be forced to answer the questions which are both subjective and sometimes beyond the capacity of an UG student. This will increase the failure rate unnecessarily and might spoil the career of a good student. To overcome this subjective inclination, OSCE was designed and is finding encouraging response all over the world. It is being widely used in midwifery, orthopedics, medicine, radiology, dental and so on.

OSCE is designed in such a fashion that the questions are objective than subjective. It is structured so well that each step is marked on a scale of 0-5 and it evaluates all the 3 domains of learning namely, cognitive, affective and psychomotor.

### AIMS & OBJECTIVES:

- To compare the previous (conventional) pattern of clinical examination with OSCE pattern.
- To see whether OSCE pattern is better alternative as compared to previous pattern with reference to:
  - Justification to each section of syllabus.
  - Impartial approach to students.
  - Addressal to recent technological ideas in clinical practice.

- Whether OSCE addresses all the domains of learning namely, cognitive, affective & psychomotor.

### MATERIALS & METHODS:

100 undergraduate students of 9<sup>th</sup> semester were in the study as examinee. Students were briefed about the OSCE pattern of examination and also about the conventional examination. A set of 5 teachers of the rank Assist. Professor and above were selected as examiners. Same examiners conducted the clinical examination in both patterns. Both exams were scheduled on different dates and carried 100 marks.

Students were given feedback forms at the end of each practical exam. The questionnaire for the feedback form consisted of Yes & No options.

The result sheet included head to head comparison between conventional practical exam pattern & OSCE. Comparison assessed whether OSCE involves all 3 domains of teaching namely, cognitive, affective & psychomotor.

### EXAM DETAILS & RULES:

- No. of students - 100
- No. of tables/stations - 5
- Marks allotted for each table/station - 20
- No. of examiners - 5
- Minimum marks required for passing - 50 out of 100.
- All answers to be written on answer sheets provided at each table.
- All stations compulsory.
- No one allowed to go out of examination hall

before time.

- Mobiles/books/laptops not allowed.
- Each station allotted 10 minutes.
- Every 10 minutes a buzzer will ring and students will move on to the next table/station.
- To start with, 5 students occupy 5 stations with one examiner at each station.
- Next 5 students appear only when first 5 students shift to next station.
- All students fill up the feedback forms.

**The OSCE examination to be conducted in the following 5 headings:**

- I. History taking
- II. General examination
- III. Systemic examination
- IV. Instruments & drugs
- V. Recent advances

**I. History taking to be evaluated by the examiner with scoring for each point from 0 – 5.**

- i. Whether chief complaints were told in chronological order or not.
- ii. Elaboration of origin, duration and progress of the chief complaints.
- iii. Past history.
- iv. Personal history.
- v. Family history.

In history taking examiner would notice the politeness of the student towards patient, art of talking, whether the student asks leading questions or not, whether he/she documents the negative history or not. At the end of history taking he/she should be able to give a tentative diagnosis.

**II. General examination –**

Here the examiner would observe the psychomotor skills of the student. Special attention would be given to positioning of the patient, hand warming technique, proper methodology and whether student possesses the examination tool kit.

**III. Systemic examination –**

Here examiner would focus on the methodology of systemic examination, gentleness during palpation and proper technique of auscultation.

**IV. Instruments & drugs –**

Here the examiner would examine the cognitive skills of the student.

**V. Recent advances –**

Here the examiner would assess the cognitive and affective domains of learning.

**OBSERVATIONS & RESULTS:**

We observed both patterns of exam with reference to feedback forms from students.

**[A] Observations for conventional pattern questions**

- 1] 70% students were unhappy with conventional pattern.
- 2] 80% felt conventional pattern exhaustive.
- 3] 77% felt conventional pattern outdated.
- 4] 85% voted in favour of OSCE pattern.

**[B] Observations for OSCE pattern questions**

- 1] 83% felt OSCE as a good alternative for conven-

tional pattern.

- 2] 92% felt OSCE addresses all domains of learning namely cognitive, affective & psychomotor
- 3] 89% felt OSCE is an impartial, objective & well structured way of clinical examination.

Above observations very clearly indicate that OSCE is a new & effective alternative way of clinical examination. Scores obtained under OSCE were higher than that of conventional clinical pattern. Passing rate with OSCE was 93%, whereas with conventional pattern it was 78%. Failure rate in OSCE was only 7%, whereas with conventional pattern it was 22%.

**Fig. 01: Miller's Prism**



OSCE is defined as objectively structured clinical examination which ensures evaluation of set of predetermined clinical competencies. Each clinical competency is broken down in to smaller components and each component is assessed in turn and marks are allotted according to predetermined check lists.

Need for the newer examination tool: The traditional tools for assessment of medical students have mainly consisted of written exams, besides viva and clinical case presentation. These have focused on the knows, know how which tests only knowledge or cognitive aspect. Hence to focus on the show how and does aspect of Millers Pyramid which tests skills and attitude of the student OSCE was developed.

**CONCLUSION:**

In nutshell, change for betterment is always a welcome sign. If technology is changing, why medical exams be conducted in a traditional way? New ideas are always welcomed & moreover innovative ways of exams will also develop interest in students & teachers. It will increase the turnout rate of the students, which is miserably dropping at least in term completion & preliminary exams.

Medical colleges train an individual for a professional career & hence it should be made interesting, should discard the outdated clinical methods and emphasize more on technology with a common denominator that it is fair system providing an objective framework for practical examination.

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