

# Research Journal of Pharmaceutical, Biological and Chemical Sciences

## Study Between Viva And OSCE For Final Year Part 1 MBBS Students At The End Of The Clinical Posting.

Ajmath Shaik<sup>1</sup>, Siddam Revathi<sup>2</sup>, Adarsh Kumar Kusuma<sup>3\*</sup>,  
Vijay Praveen Sana<sup>4</sup>, and Sanjay P Kishve<sup>5</sup>.

<sup>1</sup>Associate Professor, Department Of ENT, ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India.

<sup>2</sup>Senior Resident, Department Of ENT, ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India.

<sup>3</sup>Assistant Professor, Department Of ENT, ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India.

<sup>4</sup>Assistant Professor, Department Of ENT, ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India.

<sup>5</sup>Professor And HOD, Department Of ENT, ESIC Medical College, Sanath Nagar, Hyderabad, Telangana, India.

### ABSTARCT

In this comparative study evaluating the efficacy of Objective Structured Clinical Examination (OSCE) and Practical Viva as methods of examination for final year part 1 MBBS students undergoing clinical training in the department of ENT, a cohort of 100 students were subjected to both assessments on consecutive days. The OSCE comprised 25 stations, while Viva examinations were conducted simultaneously with 25 students in each session. Following the assessments, feedback forms were administered to all participants. The analysis of results revealed that OSCE outperformed Practical Viva, indicating its superiority as an evaluation method. The feedback from students suggested that OSCE was less anxiety-inducing, eliminating the fear factor associated with Viva exams, thereby fostering a less stressful environment conducive to optimal student performance. Consequently, this study concludes that OSCE stands out as one of the best assessment methods for final year part 1 MBBS students in the ENT department, providing a comprehensive evaluation while minimizing stressors, ultimately enhancing the students' ability to showcase their clinical skills effectively.

**Keywords:** OSCE, students, viva, stations

<https://doi.org/10.33887/rjpbcs/2023.14.6.26>

*\*Corresponding author*

## INTRODUCTION

There are many methods existing to assess the medical students including short cases, long cases, viva examination but all these patterns don't have standardization and clearly lacking the proper structural pattern and can't eliminate the bias [1] OSCE (objective structured clinical examination) was first introduced in the medical colleges by Haden and Gleeson in 1975. It has been widely used for both undergraduate and postgraduate examinations since then. He described an OSCE as "a timed examination in which medical students interact with a series of simulated patients in stations that may involve history taking, physical examination, counselling or patient management [2].

In OSCE students will pass through series of stations which includes the history taking, examination, counselling, and management and identification of instruments and steps involved in surgery diagnostic aid etc.

An OSCE comprises 20 to 25 stations depends upon students' number and they have to pass through stations within given time period and each candidate is examined his skills in one-to-one manner by an examiner or has to complete the task given in the respective station like identifying instruments its uses etc.

Each station has depend on the type of task given has a different examiner if required and candidate has to rotate through these station in the systematic time bound manner and completes the all stations, all these system is monitored by examiner where as in traditional method of viva one examiner is ascertained to entire students and candidates will have a different set of questions based on their clinical question.

## MATERIALS AND METHODS

This study has been conducted in ESIC medical college and hospital Sanatnagar Hyderabad Telangana India. At a time 25 students will be posted for ENT postings for one month and in 4 batches total 100 students in a span of 4 months. The students were informed about the OSCE exam and viva at the starting of posting i.e 30 days prior.

The pattern of exam was explained in details regarding stations and time allotted. For OSCE, 25 stations were arranged. 120 seconds time was given at each station. The stations consisted of 2 X ray stations, 3

ENT instruments, 1 audiogram, 1 tympanogram 2 histopathology specimen, 4 clinical scenarios and 3 different patients to test the examination skills, 1 osteology station 3 diagrams related to ENT and 4 theory questions were asked. 1 rest station was provided after 12th station. each station carries same marks and total OSCE is for 100 marks. Viva was conducted for the same students on the next day. Viva table had instruments, X-Rays, audiogram and specimen. It was also for 100 marks. Time frame for viva is entirely depends on examiner and no fixed time is given. At the end of OSCE and Viva, feedback form was given to all 100 students and 4 same examiners participated in OSCE and viva same examiners were given task to conduct for OSCE and viva. The observation and results were then formulated.


### Few Stations Given In OSCE

Questionnaire response in relation to tuning fork test examination given to a right conductive hearing loss patient (simulated patient) with the examiner beside.

| RESPONSE   | Yes = 1 | No = 0 |
|--|---------|--------|
| Did he greet the subject person                      |         |        |
| Did he sit with legs together one side               |         |        |
| Did he explain the procedure                         |         |        |
| Did he choose appropriate frequency of TF            |         |        |
| Did he orient the fork correctly for AC              |         |        |
| Did he place the fork on mastoid for bone conduction |         |        |
| Did he interpret correctly                           |         |        |

Instrument station

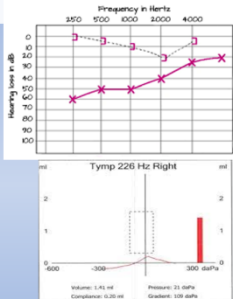
Identify instrument and answer



- Name the instrument
- List one use
- List 2 contraindications for its use


Clinical scenario framed regarding otosclerosis

A 27 years old female came to ENT opd with complaints of hard of hearing both ears since 6 months insidious onset and gradually progressive on examination bilateral TM intact and rinne bilateral negative and weber to right ear, PTA and tympanometry shows following



- What is probable diagnosis
- List one otoendoscopic sign
- What surgery u prefer for this condition
- List 2 contraindications for that surgery

A question framed in relation to tympanic membrane



- Identify the structure
- Is it right sided or left
- How many layers it has
- Name one nerve that supply to it

**RESULTS**

Total 100 students from the final part 1 MBBS and 4 same internal examiners for all exams from the department of ENT has been participated in the present study. At a time 25 students has taken examination one day for OSCE and next day for viva and questions changed every time and similar topics chosen for subsequent batch students. we have taken feedback after the OSCE and viva exam from the students and examiner separately and compiled the feedback. From the feedback form, we observed that 88% of the students agreed for OSCE to be a part of their internal practical examination and 64 % students agreed for this OSCE as a part of final university external examination. 86% students agreed that OSCE tests the in-depth knowledge and 84% students agreed that it is student friendly and 69 percent students agreed for it eliminates the fear factor. majority of students i.e 98% students agreed that time is same for all and it is beneficial. Majority students agreed that OSCE gives opportunity to cover all the syllabus and exam was well structured and sequenced and it is better than viva.

| Response   | Agree (no & percentage) | Disagree(no & percentage) |
|--|-------------------------|---------------------------|
| OSCE should be a part of your Clinical Assessment in internal exams        | 88                      | 12                        |
| OSCE should be a part of your Clinical Assessment in university exams      | 64                      | 36                        |
| OSCE tests the knowledge In-depth  | 86                      | 14                        |
| It is student friendly   | 84                      | 16                        |
| OSCE eliminates fear factor as in Viva exam                                | 69                      | 31                        |
| Time limit is the same for all students, Is it beneficial                  | 98                      | 2                         |
| Does it give the opportunity of covering almost all practical syllabus     | 78                      | 22                        |
| OSCE is more comfortable for preparation and covers all aspects of subject | 68                      | 32                        |
| Examination was well structured and sequenced                              | 88                      | 12                        |
| Instructions were clear and unambiguous                                    | 82                      | 18                        |

| Response  | Agree (no of examiners) | Disagree |
|---|-------------------------|----------|
| Instructions at each station clear                          | 4                       |          |
| Setting and context of each station appropriate             | 4                       |          |
| Time is adequate at each station                            | 4                       |          |
| OSCE minimizes risk of failing                              | 4                       |          |
| OSCE testes true competence in clinical setting             | 4                       |          |
| it is preferable over other format                          | 4                       |          |
| Should continue for all format of exams                     | 4                       |          |
| Examination was not stressful for the students              | 4                       |          |
| Stations and settings reflected authentic clinical scenario | 4                       |          |
| Planning and conducting OSCE is time consuming              | 4                       |          |

From the examiners feed back it has been observed that all the 4 examiners participated in OSCE and viva agreed that OSCE is better than viva in all aspects given in feedback form but all the examiners noted that conducting OSCE required prior work and time.

### DISCUSSION

OSCE was first introduced in 1970 and many medical colleges across the world recognizing and adopting it as standard medical evaluation exam [3, 4]. Based on feedback given by students and examiners it clearly states that students and examiners responded well positively to the OSCE format and student and examiner precepted positively and it is less stressful than traditional viva examination. Each student is exposed to the same questions, situations, and same examiners as their fellow students. Time frame is equal for every individual. Assessment also easy for examiners as they need to evaluate for specific answers for the specific questions.

In the present study students and examiners has given the overall positive response toward the organization structure attributes, and validity of OSCE. Feedback forms from students and examiners shows high acceptability of OSCE pattern for further exams also.

The most of the students in every aspect of feedback suggested OSCE to be a good assessment of knowledge and skills. It gives idea regarding strength of the examination pattern and which are considered to be among the major attributes of OSCE. Similar findings noted in studies like Majumder [5] study and Pierre RB [6] study and Khan SA<sup>7</sup> at all study.

Nasir AA [8] study showed that OSCE is nervous and stressful in 53% of the students' contrary that in the present study 84% students suggested that OSCE is student friendly and 69 % students given feedback that it is eliminated the fear factor when compared to viva. A study by Shitu B [9] also noted that OSCE is less stressful.

Time was sufficient to complete the stations and 92 % of the students satisfactorily completed the station within time frame as it may be due to rest station given at 12th station which can be utilized to complete leftover answers and to complete the sheet. Time is the challenging task by students and it has to be managed carefully. In this study due to less complexity of the questions and direct one sentence questions and answers might be the reason as students utilized the time properly. If more analytical and complex questions were asked then time would have been a significant factor. Emadzadeh A [10] noted in his study that time is the significant factor and main challenge of the OSCE part of the exam was the imbalance and disproportion between the allowed time and the task load in each exam stage. Ataro G [11] study also noted that time is the significant factor.

The present study taken in 4 parts and 25 students in each part as it is a significant number to conduct OSCE and we noted that it is a comprehensive evaluation by both student and examiner and there are limitations in the present study as in the present study we failed to rule out the causes for negative response which need to addressed in the subsequent exams for next batches.

The pattern of the stations and questionnaire in the OSCE has to be prepared carefully without any controversy in the answers. OSCE has wide variety of scope to touch the all corners and the topics of the subject. At the same time clinical skills are also tested in the exam same time so they can learn these skills from the faculty with more careful as they have to perform during exam.

Conducting OSCE is challenging when compared with conventional viva as it required human and material resources, and needs adequate time for preparation [11, 12].

## CONCLUSIONS

It is one of the best methods to assess the students and eliminates fear factor and less stressful so that students can perform better. Students' skill is tested during the OSCE exam which is not possible in conventional viva and this pattern is easy for teachers to evaluate but its time consuming to prepare and plan stations.

## REFERENCES

- [1] Khan KZ, Ramachandran S, Gaunt K, Pushkar P. The objective structured clinical exam (OSCE). AMEE guide no. 81—part I: an historical and theoretical perspective. *Med Teach* 2013;35(9): e1437–e1446.
- [2] Harden RM, Stevenson M, Downie WW, Wilson GM. Assessment of clinical competence using objective structured examination. *Br Med J* 1975; 1:447–451.
- [3] Eldarir SA, El Sebaae HA, El Feky HA, Hussein HA, El Fadil NA, El Shaeer IH. An introduction of OSCE versus traditional method in nursing education. *JMSCR* 2017;5(1): 15989-15992. and students' perspectives. *J Am Sci* 2010; 6:1002–14.
- [4] Barman A. Critiques on the objective structured clinical examination. *Ann Acad Med Singapore* 2005;34:478–82.
- [5] Majumder MAA, Kumar A, Krishnamurthy K, Ojeh N, Adams OP, Sa B. An evaluative study of objective structured clinical examination (OSCE): students and examiners perspectives. *Adv Med Educ Pract* 2019; 10:387–397.
- [6] Pierre RB, Wierenga A, Barton M, Branday JM, Christie CD. Student evaluation of an OSCE in paediatrics at the University of the West Indies, Jamaica. *BMC Med Educ* 2004; 4:22.
- [7] Khan SA, Aaraj S, Talat S, Javed N. Students' perception and scores in Paediatrics end-of-clerkship and final professional objective structured clinical examination (OSCE): a comparative study. *Pak J Med Sci* 2021;37(2):525–530.
- [8] Nasir AA, Yusuf AS, Abdur-Rahman LO, et al. Medical students' perception of objective structured clinical examination: a feedback for process improvement. *J Surg Educ* 2014;71(5):701–706.



- [9] Shitu B, Girma T. Objective structured clinical examination (OSCE): examinee's perception at department of pediatrics and child health, Jimma university. *Ethiop J Health Sci* 2008;18(2):47–52.
- [10] Emadzadeh A, Ravanshad Y, Makarem A, et al. Challenges of OSCE national board exam in Iran from participants' perspective. *Electron Physician* 2017;9(4):4195–4201.
- [11] Ataro G, Worku S, Asaminew T. Experience and challenges of objective structured clinical examination (OSCE): perspective of students and examiners in a clinical department of Ethiopian University. *Ethiop J Health Sci* 2020;30(3):417–426.
- [12] Zayyan M. Objective structured clinical examination: the assessment of choice. *Oman Med J* 2011;26(4):219–222.