

Original Research Article

Student perception of OSCE as a learning tool in Osmania Medical College, Hyderabad, Telangana

¹C. Saroja, ² C. Sathyasree, ³A. Santa Kumari, ⁴O. Padmini

^{1,2,4}Associate Professor, ³Professor and Head of the Department of Physiology, Osmania Medical College, Koti, Hyderabad

*Corresponding author: Dr. C. Sathyasree, Associate Professor, Department of Physiology, Osmania Medical College & Hospital, Hyderabad.

Abstract

Background: The objective structured clinical examination has been introduced as an efficient tool for assessment of medical students. The aim of the present study was to know students perception on OSCE as a learning tool. To study student perception of usefulness of OSCE as a learning tool objectively based on their answers to questions given in a feedback form after subjecting them to a session of OSCE.

Materials & Methods: This cross -sectional study was done on 239 first MBBS students of Osmania Medical College, Koti, Hyderabad, Telangana. Students responded by answering to questions given in feedback form.

Results: Out of 250 students 239 students attended session were given student feedback form with questioner after attending OSCE session. 239 students felt that OSCE is useful and they are of the opinion that this method of learning useful than the conventional method. These students of 200 wanted more OSCE to be conducted and 30 students said that they have identified their mistakes 9 students said that attending OSCE was interesting.

Conclusions: The study clearly indicates that students perceive OSCE as an excellent learning tool for skill and attitude acquisition in medical education.

Key Words: Perception of OSCE, Student Assessment, Student Performance, Clinical Skills

Introduction:

Objective structured clinical examination (OSCE), a method of assessing the clinical competency of medical students¹ was introduced in 1975 by Harden and Gleeson. Since then it has become a standard method of examination and has proved time and again, to be an excellent procedure to assess the students' competitive and analytical skills such as communication, interpretation and correlation of data and most importantly their proficiency in clinical examination and application. It can also be considered as a wonderful learning tool as the student can identify deficiencies and rectify them by focusing on the same in an organized manner instead of learning in a vague and nonspecific way. This is possible here as the methodology includes splitting the questionnaires into segments in a chronological order to cover the entire topic. Other equally important advantages of OSCE are that the method involves less time, but caters to uniformity of assessment of the students eliminating examiner bias and thought block. But assessment methods such as these can have authenticity and wider acceptance only when the examinees' (students) perception is also taken into consideration in terms of their usefulness. reliability, uniformity of assessment, means to learn and correct their mistakes. This increases the validity of OSCE and the same should be

perceived by the student. The present study was undertaken to achieve this goal and analyze the student's point of view.

Materials & Methods:

The study was carried out on 250 first MBBS students of 2017 batch in the department of Physiology in Osmania Medical College, Koti, Hyderabad. As 11 students were absent, 239 students were divided into four groups comprising of 60, 60, 60, and 59 subjects respectively. The examination was conducted from Monday to Thursday taking one group per day. 16 faculty members participated in the study. They were given previously prepared OSCE check lists containing questions with marks allotted, related to assessment of proficiency in clinical examination of cardiovascular and respiratory systems and general examination. Each student was examined by one faculty member on all topics. Finally the total scores were calculated. The students were also handed over feedback forms at the end of the session which they had to submit after 30 minutes duly filled in and with remarks. The feed back forms contained questions to gauge the students' perception of usefulness of OSCE as an important and effective learning tool which fulfills their academic requirement.

STUDENT FEEDBACK FORM

Name:

Roll Number

Did you attend the session of OSCE? Yes/No

How is the OSCE Session? Useful/Not Useful

How was your learning in OSCE compared to conventional method? Better/Worse

Could you identify deficiencies in knowledge?

Did you learn to rectify the same?

Do you think students need prior training to face OSCE?

Any further suggestions:

Results:

Out of 250 students, 239 students attended session, 11 students were absent for OSCE session

Feedback for OSCE's usefulness for 239 students who attended the session.

239 students felt that OSCE is useful.

Students were questioned about their opinion on method of learning, 239 students opted OSCE verses traditional.

Students were asked for suggestions out of 239 students 200 students wanted more OSCE's to be conducted 30 students said they identified their mistakes 9students said attending OSCE was interesting.

Table No.1

<u>QUESTIONS IN FEEDBACK FORM</u>	<u>NUMBER OF STUDENTS WHO ANSWERED IN THEAFFIRMATIVE</u>
Do you think OSCE is useful?	239
Do you think OSCE is better than Conventional method?	239
Could you identify deficiencies in knowledge?	230
Did you learn to rectify the same?	230
Do you think students need prior training to face OSCE?	239
More tests of OSCE needed	200
Interesting method of learning	09

Discussion:

The Clinical Assessment of medical students based on OSCE as an excellent tool for analyzing and grading their clinical efficiency has been confirmed by several studies worldwide. Evaluating critical areas, in the subjective method like clinical case examination, will be assessing theory rather than practical performance. The OSCE however, covers broader range like problem solving, communication skills, decision-making abilities under the supervision of examiner.

It is an unbiased, accurate judging method which leaves no scope for subjective partiality² as it is basically an objective method with the topic split into minute segments in which the questions are framed and given marks. This is done in such a way that a faculty member holding a preformed check list, who is not well versed in the subject can also allot marks accurately by observation. So it definitely helps the examiner to conduct the assessment in an honest manner, enabling recall, teaching audit and determination of standards and maintaining uniformity. But there is another side to the argument when we dwell on the validity of the method from a student's perception. It is a procedure which surely helps the student to improve his knowledge and skills as he can identify his area of weakness and work towards strengthening it. The same should be vouched for by the student. Interestingly our study showed that OSCE was well appreciated by the students and their acceptance of this type of examination system is at a high level.^{3,4.}

Another more important method of OSCE which cannot be ignored is that the questions are framed in chronological order of the steps involved in a particular procedure. Hence the student once exposed to OSCE will learn to focus on each and every step of clinical examination while preparing for the test as any step may appear as a question on the checklist. Thorough understanding of the topic is therefore mandatory.

All the students opted for OSCE compared with conventional methods as they could perform a variety of clinical tasks in a given short time of being judged by the examiner with check list. (EL Nemer & Kandeel,(2009).⁵

They wanted more frequent conduction of such tests so that they could become perfect in clinical examination which helps them in performing their duties efficiently when they go to clinical departments. it also improves their diagnostic and therapeutic skills. This was similar to the findings of (Duerson, Newble 2009)⁶, (Iranian Red Crescent Med J. 2014).⁷

OSCE, as the standard objective tool for assessment of competency, clinical skills, instead of assessing through history taking, case sheet writing, physical examination which was long and tedious, was stressed by the students.

Nine students also found the method interesting (Dadgar SR, 2008).⁸ A positive observation which will probably prevent absenteeism and ensure attendance. Students also felt that OSCE was meaningful & fairest method of assessing clinical skills (Turner & Dankoski, (2008)⁹, Smith LJ et al¹⁰, Lazarus J et al¹¹. They also appreciated the timely feedback as they could identify their mistakes and were also updated on their strong and weak points by the examiners (Cohen et al.,1990; Carraccio & Englander,2000).^{12,13},

Conclusion:

As the students have already been exposed to the conventional method in previous examinations, it can be assumed that they are definitely in a position to compare and determine the effectiveness and validity of both the methods. The study clearly indicates that students perceive OSCE as an excellent learning tool for skill and attitude acquisition in medical education. Hence OSCE as a student- friendly method should be implemented frequently to induce wider student compliance for acquiring clinical skills.

Acknowledgment:

The authors wish to thank Dr. A. Santha Kumar (Professor & HOD), Dr. R. Anitha (Professor), Dr. O. Padmini (Professor) Dr. Mirza and Dr. Geetha S of Osmania Medical College, Hyderabad for their kind cooperation in performing the OSCE.

References:

- 1) Harden RM Gleeson FA. Assessment of clinical competence using an objective structured clinical examination (OSCE) *Med Educ.* 1979 Jan;13(1):41-54. [Pub Med]
- 2) Pierre PB, Wierenga A, Barton M, Branday J M, Christie C D. Student evaluation of an OSCE in pediatrics at the University of West Indies. *Jamaica. BMC Med* 2004;422.[Pub Med]
- 3) M Iqbal, B Khizr, Z Zaidi. Revising an Objective Structured Clinical Examination in a Resource-limited Pakistani Medical School, *Education for Health*, vol 22,issue 1, 2009.)
- 4) Ismail HM. J Views of undergraduate students on objective structured clinical examination in neurology: a preliminary report. *J Family community Med* 2001 Sep;8(3): 79-82[Pub Med]
- 5) El-Nemer, Amina M. R. and Nahed Kandeel. “Using OSCE as an Assessment Tool for Clinical Skills: Nursing Students ' Feedback.” (2012).

- 6) Duerson M. C., Romrell, L. J.,&Stevens, C. B.(2000) Impacting faculty teaching and student performance: nine years' experience with the objective structured clinical examination. *Teaching and Learning in Medicine*,12,176-182.
- 7) Ahmad Khosravi Khorashad; Somayyeh Salari; Humain Baharvahdat; Sepideh Hejazi; Maasoomah Salari; Maryam Mazioomi; and Shahrzad M Lari. The assessment of undergraduate Medical Students Satisfaction Levels With the Objective Structured Clinical Examination, *Iranian Red Crescent Med J*. 2014 Aug; 16(8):
- 8) Dadgar SR, Saleh A, Bahador H,, Baradaran, HR.(2008).OSCE as a tool for evaluation of practical semiology in comparison to MCQ & oral examination. *J PakMed Assoc*.2008;58(9):506-7.
- 9) Turner& Dankoski, (2008).
- 10) Smith LJ, Price DA, Houston I B. Objective structured clinical examination compared with other forms of student assessment. *Arch Dis Child*.1984;59(12):1173-6.
- 11) Lazarus J, Kent AP. Student attitude towards the objective structured clinical examination(OSCE)and conventional methods of assessment. *S Afr Med J*. 1983;64(11):390-4.[PubMed]
- 12) Cohen, R., Reznick, R K., Taylor, B. R., Provan, J.,& Rothman, A.(1990). Reliability and validity of the objective structured clinical examination in assessing surgical residents. *American Journal of Surgery*,160(3),302-5.
- 13) Carraccio, C.,& Englander, R.(2000).The objective structured clinical examination, a step in the direction of competency based evaluation. *Archives of Pediatrics &Adolescent Medicine*,154, 736-741.