

# Student's Perception on Objective Structured Practical Examination in Pathology

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[Received: 05/06/2013, Revised: 23/06/2013, Accepted: 29/06/2013]

## Abstract

**Background:** OSPE (Objective structured practical examination) which is the modification of OSCE (objective structured clinical examination) has been widely used in the assessment of student's practical performance.

**Aim :** To evaluate student's feedback about OSPE as an assessment tool for their Laboratory exercise.

**Methodology:** OSPE module was introduced for eighty one undergraduate medical students during the first half of their second MBBS course. Student's perception towards OSPE was assessed by means of their response to standard questionnaire.

**Results:** OSPE has been accepted by 82% of medical student's as a fair assessment tool, which covered a wide range of knowledge, minimized the chance of failing and highlighted area of weakness. Going through OSPE was a useful practical experience for medical students. However, 31% of them felt that OSPE was stressful and time allotted for each station to be inadequate.

**Conclusion:** The feedback received regarding this evaluation tool provides evidence that OSPE is an acceptable, useful assessment tool for Practical skills. Such feedback is considered valuable for further development and enhancement of OSPE.

**Key words:** OSPE, Assessment tool, Practical skills, Student's feedback

## Introduction

Assessment drives learning. In spite of undergraduate medical education undergoing extensive reevaluation and faculty being trained in various methods of assessing the students, new evaluation system like OSCE/OSPE are yet to be introduced for summative assessment. This is essential as medical students are assessed for their knowledge, comprehension, psychomotor skills and ability to communicate.<sup>1,2</sup>

OSPE (Objective structured practical examination) is the modification of OSCE (objective structured clinical examination) for evaluating practical skills in basic science. Traditional examination overlooks the demonstration of individual competencies and the scoring system mainly reflects the global performance of the students. OSPE has been found to be objective, valid, and reliable tool for assessment and eliminates examiner bias.<sup>3</sup>

OSPE examination consists of about 15-20 stations.

Each station is designed to test a component of experimental competence. At "procedure stations" students are given tasks to perform on subjects or on instruments only. At all such stations there are observers with agreed check lists to mark the student's performance. At other stations called "response stations", students write the answers of the objective type questions or interpret data or record their findings of the previous procedure stations

The present study was undertaken to determine the student perception and satisfaction regarding OSPE as a method of assessment of laboratory exercise in pathology

## Methodology

The Present study was undertaken in the department of pathology at S.S. Institute Of Medical Science and Research Centre. OSPE module was introduced for eighty one undergraduate medical students during the first half of their second MBBS course.

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During the OSPE, students were made to rotate through 14 stations, of which 8 stations were procedural stations to test the skills that students had to perform before the examiner. At all procedure stations there were observers with agreed check lists to score the student's performance. 6 stations were response or non-observed stations composed of questions that tested their cognitive domain. 81 students were divided in to four groups. Seven rest stations were kept to accommodate 21 students. Students were given four minutes at each stations. Examination was conducted in four sessions with alternative 20 and 21 students in each session of 80minutes duration on two consecutive days with two sessions on each day.

In the present study students perception towards OSPE was assessed by means of their response to standard questionnaire so that its value as an assessment tool can be evaluated. Students were instructed to indicate their opinion by ticking one of the three alternatives viz., agree, can't say and disagree (Table 1).

Questionnaire	Agree	Can't say	Disagree
Exam process is fair	82%	16%	02%
Exam is well structured	62%	32%	06%
Covers appropriate knowledge area	59%	37%	04%
Assessed relevant practical skills	74%	21%	05%
It was stressful	31%	33%	36%
It is less useful than conventional exam	17%	28%	55%
Decreases the chances of failing	42%	43%	15%
Highlighted the area of weakness	72%	23%	05%
Need more time at each station	61%	22%	17%
Aware of level of information asked in OSPE	47%	44%	09%

**Table 1: show student's perception regarding OSPE**

**Results**

OSPE module was introduced for eighty one undergraduate medical students during the first half of their second MBBS course. Forty students (49.4%) were boys and 41 students (50.6%) were girls. Table 1 shows student's perception regarding OSPE.

Eighty one percent of students felt OSPE as an evaluation tool for the practical exercise is fair and

62% of students perceived it as well structured practical examination pattern.

Fifty nine percent opined that structured pattern of evaluation covers the appropriate cognitive domain in assessing the knowledge and comprehension. 74% felt relevant psychomotor skills were assessed using agreed check list.

Thirty six percent of students perceived OSPE to be less stressful and 55% felt it to be useful than the conventional examination pattern. 42% opined that OSPE decreases the chance of failing in the exam and 72% felt it highlighted the area of weakness.

Sixty one percent of the students felt that the time given was too short especially for observed stations and 47% felt they could comprehend the OSCE pattern of examination in comparison to traditional method.

**DISCUSSION**

As is your pathology so is your medicine as said by William Osler Pathology forms the basis of medicine and prepares students for clinical practice. The conventional practical examination is beset with several problems. The final score indicating overall performance gives no significant feedback to the candidate and are not based on demonstration of individual competencies.<sup>4,5,6</sup>

Objective structured practical examination is one of the new pattern of examination system designed to make assessment objective, valid and reliable. Over the years, experience has led to the use of OSPE not merely as an evaluation tool and also method of assessment in the international medical school. This has largely been attributable to the feedback that OSPE gives both to students and teachers.<sup>1</sup>

OSPE model in pathology was introduced for eighty one undergraduate medical students of second MBBS after briefing about the new system of examination. Feedback given by students was constructive which are presented in Table 1. OSPE was seen as a positive and a useful practical experience by most students (82%). We find this congruent with other study in which students perceived OSPE as a favorable experience that should be repeated regularly.<sup>1</sup>

Feedback from students (74%) suggests that OSPE is an objective tool in evaluating practical skills. Students perceived OSPE scores as a true measure for essential practical skills being evaluated, standardized and not affected by student personality. Standard to

check the competencies are made earlier and agreed check lists are used for marking and evaluation<sup>4,7</sup>.

Students provided positive feedback about the quality of OSPE performance in terms of the instructions of the exam (62%) and individual competencies being assessed (72%). Examiner variability can be reduced by adopting structured practical examination. In addition to the above points, OSPE ensures integration of teaching and evaluation.<sup>7</sup>

The evaluation of OSPE by students highlighted some areas that need to be enhanced in future, such as inadequate time at procedure stations. OSPE was perceived as a stressful experience by 31% of students. This perception could be due to the fact that this was the first time that OSPE has been implemented in Pathology. Hence, it was a new experience for all medical students which made them anxious about it.

From the students' point of view, OSPE was acceptable and generated wide appreciation. Feedback from the students indicated that students were in favor of OSPE. The feedback provided scope for improvement and refining the method. It serves as a tool for testing multiple dimensions of student performance because it tests both skills as in

performance exercises and knowledge. Present study was helpful in sensitizing the student towards OSPE.

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### How to Cite this article :

Manjula A, Shashikala P, Nagaraj P. Student's Perception on Objective Structured Practical Examination in Pathology *J Educational Res & Med Teach* 2013;1(1):28-30.

Funding: Declared none Conflict of interest: Declared none