

Original Research Article

Perception of medical teachers and students regarding objective structured long examination record as an assessment tool- a prospective study

Pradnya Bhalerao*

Department of Anaesthesia, Government Medical College, Miraj, Maharashtra, India

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***Correspondence:**

Dr. Pradnya Bhalerao,

E-mail: dr.pradnyabhalerao@gmail.com

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ABSTRACT

Background: Traditional method of assessment of a long case in practical examinations is broad based. All domains of learning are not evaluated and areas of weakness not categorised.

Methods: A structured format, the objective structured long examination record (OSLER) for assessment of post graduate students in anaesthesiology for long case presentations was prepared. The impact of the new tool on the faculty, the students and the overall performance of the students was assessed through questionnaires and scoring systems.

Results: We found that 75% students and 100% teachers agreed that the conduct of examination was fair. There was a 100% agreement among both that the OSLER provided an opportunity to the process of learning. 63% accepted that the questions were clear and unambiguous. 88% students agreed upon having exams conducted in a similar format in future. 75% teachers opined that they would like to take an exam in a similar form. 65% teachers agreed that more initial preparation time was needed and 58% thought that training was required.

Conclusions: OSLER is a good technique for assessment of a long case in practical examination.

Keywords: Assessment, Long case, OSLER

INTRODUCTION

Practical examinations play a very important role in the certification of candidates before they can practice medicine. Long case presentation has been a method of assessment of medical students in practical examination for a long time in major undergraduate and postgraduate subjects.

This system of evaluation is subjective, broad based and often affected by subject and environmental factors. This leads to inconsistencies in grading. Objective structured long examination record (OSLER) is a more structured and objective method of assessment.¹ We thus introduced

this concept in assessment of the postgraduate students in anaesthesiology.

METHODS

The pilot project on OSLER was undertaken between the year 2009-2010 with the permission of the institutional dean. The method of assessment was conducted on eight, third year postgraduate students in anaesthesiology.

The post graduate program for long case discussions was planned. The evaluation of each case discussion was structured under ten broad headings and further sub-units as per the requirement of the subject.

The ten-item scale included four items on history taking, three items on physical examination, and one item each on formulation of appropriate investigations in a logical sequence, appropriate management, and clinical acumen. The four items on history included pace and clarity of presentation, communication process, systematic approach, and establishment of case facts. The three items on physical examination included a systematic approach, examination technique, establishment of correct physical findings. More weightage was given to the anaesthetic management of the patient. The last item of assessment of clinic acumen was based on the previous nine items to assess candidate's ability to identify and solve problems.

Ten faculty members were taken into confidence and the concept of assessment using the OSLER was introduced to them. A scoring system was devised in consultation with the senior faculty. A separate communication skill questionnaire was included. The students were sensitized to the technique and detailed regarding the process of evaluation. The total duration of the examination was forty-five minutes.

A questionnaire was devised for the evaluation of the OSLER by students and the faculty. Quality of performance testing was judged by the performer as per the questionnaire devised. The questionnaires were revised based on the feedback from the faculty. Overall sixteen OSLERS were conducted and the results were assessed. This was considered as a part of formative assessment.

RESULTS

We found that 75% students and 100% teachers agreed that the conduct of examination was fair. 75% students and 72% teachers agreed that a wide area of knowledge was covered. 88% students and 86% teachers agreed that the technique compensated when there were areas of weakness. 38% students and 80% teachers agreed that it was well structured (Table 1).

Table 1: Well-structured and sequenced.

	Agree	Neutral	Disagree
Teacher	82%	18%	0%
Student	38%	50%	12%

75% students and 78% teachers agreed that the method allowed the highlighting of areas of weakness (Table 2).

Table 2: Highlights areas of weakness.

	Agree	Neutral	Disagree
Teacher	78%	8%	14%
Student	75%	25%	0%

63% students and 64% teachers agreed that a wide area of knowledge was covered. 50% students and 14% teachers

thought that the exam was stressful (Table 3). 50% students and 79% teachers agreed that chances of failure were low. There was a 100% agreement among both that the OSLER provided an opportunity to the process of learning.

Table 3: Exam stressful.

	Agree	Neutral	Disagree	No comments
Teacher	14%	0%	79%	7%
Student	50%	25%	12%	13%

75% of students said that they were fully aware of nature of exam (Table 4). 75% agreed that the tasks reflect those taught and 63% accepted that the questions were clear and unambiguous. 88% students agreed upon having exams conducted in a similar format in future.

Table 4: Fully aware of nature of exam.

	Great extent	Neutral	Not at all
Student	75%	13%	12%

75% teachers opined that they would like to take an exam in a similar form. However, 65% agreed that more initial preparation time was needed. 58% thought that training was required to conduct the OSLER (Table 5).

Table 5: Training required.

	Great extent	Neutral	Not at all
Teacher	58%	3%	39%

The overall OSLER score was more than 70% in 62% of students (Table 6). Communication skills score more than 70% in 25% of students (Table 7).

Table 6: OSLER score.

Percentage students	Percentage scores
0	<50
0	51-60
37.50%	61-70
62.50%	>70

Table 7: Communication skill score.

Percentage students	Percentage scores
25	<50
12.5	51-60
37.50	61-70
25	>70

DISCUSSION

Traditional methods of examination, especially the long case is broad based. All domains of learning are not evaluated and areas of weakness are not categorized.

Much criticism has been directed at the assessment of clinical competence and at the use of the 'long case'. Bearing these criticisms in mind, the Objective Structured Long Examination Record (OSLER) was developed.²

In recent years, the physician's ability to perform physical examination skills and to apply the findings to clinical decision making has been questioned. Public opinion on the communication skills has been declining, and the standards for teaching professionalism to our students and residents have been scrutinized.³ Thus the need to include communication skill assessment is important.

In an OSLER, examiners acting individually grade each of the ten items, and decide on an overall grade and mark prior to discussion with their co-examiner. The assessment by the individual examiner of each of the ten items is carried out using a grading system of 'P+', 'P' and 'P-'. 'P+' represents an excellent or very good performance, 'P' represents a candidate's performance which would be regarded as a safe pass to a borderline pass and 'P-' identifies a candidate who does not achieve a pass grade in the particular item in question.

Present objective was to develop a structured format for assessment of post graduate students (third year) in anaesthesiology for long case presentations, to determine the impact of the new tool on the faculty and the students. It also assessed the overall performance of the students through questionnaires and scoring systems. The process helped to create a pool of enthusiastic students and faculty. The teachers and student and perception regarding the OSLER was overall positive. In a study conducted on undergraduate students 88.2% of students and all assessors perceived the assessment process to be fair.⁴ In present study we had similar results.

There was a unanimous agreement among both students and teachers that the OSLER provided an opportunity to learn. This was because of the method being able to highlight areas of less competence (Table 2) and scope for improvement as well and wider areas in the context being covered. Regarding stress of the examination (Table 3), 50% student found that the exam was stressful. A high prevalence of stress among medical students is a cause of concern as it may impair behavior of students, diminish learning, and ultimately affect patient care. The overall prevalence of stress is in the range of 40% to 65%. Increased irritability (68.14%), and mood swings (50.88%) are observed.^{5,6}

When students get conversant with the technique of examination and their scores improve, the stress levels would definitely go down. Besides in our study, 25% were neutral on the issue and another 12% did not comment. The faculty was happy to take the examination in the same format again. 58% of the teachers were willing to get trained to conduct the OSLER before the next session. However, 39% thought training was not required (Table 5). For years, long case examination has

been the tool to reinforce educational goals. Over years we as teachers are adapted to a generalized unstructured approach. Assessment determines what and how students choose to study. Potentially superficial assessment drives surface learning rather than deep learning. Hence the need for a change to structured assessment.⁷

In a 'long case examination', the candidate is given about an hour to work-up a case. By the time the examiner reaches the candidate, the history is taken and physical examination is already done. The product of history taking and physical examination is assessed, the process is not observed. The discussion frequently focuses around the theoretical aspects of differential diagnosis, planning of investigations, and management. The approach and the expectations of different examiners may be different.⁸

In another study, 100% of the students supported continuation of this format (OSLER) of assessment. 52.9% of the assessors rated this format as consuming significant manpower and time resources. However, 88.2% found it manageable and 82.3% supported its continuation.⁹ In the present study, 88% students agreed upon having exams conducted in a similar format in future. 75% teachers opined that they would like to take an exam in a similar form.

When used in clinical postings, the provision of immediate specific feedback to the students based on the checklists also improves their learning. At the same time, if many students perform poorly on a given task or miss a particular step, it serves as a feedback to the teachers that the topic needs to be taught in a better way.¹⁰

In the present study, more emphasis and grading was given to the anaesthetic management. Marks were assigned to each point. The total of hundred-mark assessment was done. The passing was kept at 50%. We found that the OSLER score was more than 70% in 62% students (Table 6). This was probably because the postgraduate program was put up a week in advance and the student knew which case was to be presented. Besides since this was structured assessment students could tide over the weak areas. Students and teachers both were aware of the nature of the examination.

Communication skills score was more than 70% in 25% of students and 25% had less than 50% marks (Table 7). This showed that students were lagging in this area and that this zone needed attention. The strength of our study was the positive feedback from most of the faculty and students. Assessment of communication skills was a plus point; something which was not done in formative assessment. This technique also gave the students a focused chance to improvise on their weak areas.

The limitation of the study was the small sample size. It was our first experience, so we had to tide over the initial faculty resistance as the OSLER preparation was time consuming.

CONCLUSION

OSLER is a good technique of evaluation. It is a fair assessment, allows compensation in some areas and highlights areas of weakness. The technique urges the student to perform better subsequently. Thus it is a useful tool in formative and even summative assessment.

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