

STUDENT'S PERCEPTION OF OBJECTIVE STRUCTURED PRACTICAL EXAMINATION (OSPE) AS AN ASSESSMENT TOOL

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ABSTRACT

Background: Education and verification of results are interrelated. The verification of such learning outcomes not only verifies the knowledge but also project-specific skills. The Conventional practical exam is beset with many problems. Hence the need for some innovation is required. **Objective:** The present study was conducted to evaluate the implementation of OSCE, a new method of assessment for medical students by student feedback. **Material & Methods:** A Observational Study including 50 first year M.B.B.S. Students were conducted in the Department of Physiology in ESIC Medical College & PGIMSR, K.K.Nagar, Chennai. Topics from Respiratory Physiology were chosen for OSPE. On the day of OSPE 3 stations were arranged and three minutes were allotted for each station. Data about the feedback of OSPE was collected from participants using a validated and structured Questionnaire. **Results:** The study shows that OSCE is an effective tool and can be used to test the knowledge, skills, and attitude of the medical student by enhancing objectivity in the assessment.

Keywords: OSPE, assessment tool, knowledge, skills, and attitude



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INTRODUCTION

The Education and verification of results are inter-related elements. It is important that the methods of verification of such learning outcomes not only verify the knowledge but also project-specific skills. Because the effectiveness of professional training is often equated with meeting social needs or fitting for the purpose which was expected. So, Constructing a training program based on professional needs, standards and accreditation are necessary. (1,2) So far, there has been no single method identified as effective in the training assessment of Medical students.

The Literature presents various methods to evaluate the knowledge and skills, like Multiple Choice Question, Case-based Multiple Choice Question, a written examination including essay, every-day clinical assessment, single direct observation, long-term evaluation, direct observation of procedural skills, record review, Triple Jump Exercise, assessment based on portfolio, student's self-assessment, computer-based simulation, paper and presentation assessment, Clinical Competency Examination and OSCE (Objective Structured Clinical Examination). (3,4,5,6). But Traditional practical examinations are prone to examiner bias

and variable difficulty level of problems. The Conventional practical exam is beset with many problems also it does not cover the entire subject. Marks reflect only global performance & not the competencies of the students. The Final scores give no significant feedback to the candidates. Hence the need for some innovation is required.

OSPEs are known to increase objectivity by using a standardized checklist. OSCE consists of multiple stations and the students are required to perform definite tasks to demonstrate competency in their skills. Objective Structured Clinical Examination is focused on assessing the knowledge, professional attitudes and psychomotor skills. Therefore it provides for safe and effective medical practice. OSPE is an objective and unbiased method of examination. OSCE also identifies the areas where the students lack and helps focus on teaching in these areas. OSPE could be a valid and reliable form of assessment of clinical competency in the Physiology Practical Examination, as it incorporates communication skill, Clinical and procedural skill and, technical skill competency. But OSCE has been used to a much lesser extent in the core subjects. (7) Monitoring and evaluation are integral to the teaching-learning process.(8)

The aim of our study was to evaluate the implementation of OSCE, a new method of assessment for medical students by students' feedback.

METHODOLOGY

An Observational Study cross-sectional study was conducted in the Department of Physiology in ESIC Medical College & PGIMS, Chennai. 50 first-year M.B.B.S. Students were included in the study after obtaining Institutional Ethical approval from the Research Ethics Board, ESIC Medical College & PGIMS, Chennai. Topics from Respiratory Physiology were chosen for OSPE. On the day of OSPE 3 stations were arranged and three minutes were allotted for each station. OSPE Stations were prepared with structured questions for procedural skills well ahead on time by OSPE Team plus an administrator and Uniform break was given in between. Data about the feedback of OSPE was collected from participants using validated and structured Questionnaire.

Statistical Analysis: After collection, data were checked for consistency and competency and completeness. Then the data was entered in database Statistical Package for the Social Sciences (SPSS)

software version 21.

RESULTS

The The questionnaire was given to the 50 students who attended the OSPE. Feedback about the student' perception on OSPE was collected and analyzed. Average scores were calculated for the 10 items of the questionnaire and the results are as follows, 46% students found the exam was stressful, 54% students said there was fear of examiner, 62% students reported they needed more time at each station, 98% students felt that this type of assessment would stimulate their learning in the future and 94% students were comfortable through the process.

For 98% of students it helped to Focus on learning objectives and for 100% students, it helped to identify their errors. 94% students said OSPE plays an important role in learning and 96% students reported that their practical skills were tested perfectly and 93 felt that wide range of skills were covered.

From the results it is clear that OSPE provides for the careful specification of content with a wide sample of activities, also can be conducted within the available resources and each student can be assessed on the same task proving OSPE a Valid, Reliable, Feasible and Acceptable tool in the assessment for medical education

DISCUSSION

The study shows that OSCE is an effective tool and can be used to test the knowledge, skills and attitude of the medical student by enhancing objectivity in the assessment. Also, several studies have demonstrated similar findings showing OSPE as a reliable assessment tool. It has several advantages avoids examiners bias and gives equal opportunity to all the candidates. OSPE examination can be modified as per the institution and is recommended for formative assessment as well. (9)

A similar study from King Faisal University Medical School reported improvement in the scores for the laboratory component of the final exams in the physiology. (10) Another study from Manipal reported that approximately 63% of the students showed a performance in the scores obtained by the OSPE. (11) Our study showed that the method was highly praised by the majority of students and as a useful tool in the development of intellectual, practical skills. According to the students, OSCE should be evaluated favorably by content and organization. They scored high in the majority of categories. OSPE consists of multiple tasks and

allows us to compensate for any deficiencies of knowledge or skills. It is practical, useful and it eliminates objectivity bias, but it is also expensive (from EUR 31.51 to EUR 145.23 per individual). (12,13,14)

OSCE has gained acceptance for assessing clinical competence and has been adopted by several health professions. OSCE is a standardized assessment procedure that ensures objectivity and reliability. (15,16,17) Our findings are supported by the study done by Rentschler et al. where they found that the overall the feedback of medical students' about OSCE were positive. (18) Zartman R et al in their study found that the implementation of OSCE is time consuming, and requires huge resources and more effort. (19). Similarly, the study done by Allen R. et al reported students' stress to the new experience of OSCE. (20) Ahuja et al showed that OSCE is valid and is a reliable tool for assessment of the students' skills. (21)

Limitation:

The limitation of OSPE include resistance from faculty and students to participate as this is a tedious procedure so, both can be reluctant, also an adequate number of observers should be made available to evaluate students with patience and man-power requirement could limit the feasibility.

CONCLUSION

OSPE is a feasible and reliable tool for formative and formal assessment of the students' skills. Well-constructed checklists and faculty training improve reliability. Teamwork is important for the successful conduct of OSPE.

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