

OSCE as a tool for evaluation of practical semiology in comparison to MCQ & Oral examination

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Abstract

Objective: To compare medical students' perceptions regarding Objectively Structured Clinical Examination (OSCE) with Multiple Choice Questions (MCQ) and Oral exam in their semiology course.

Methods: We used a questionnaire with 10 questions regarding the quality of exam (Likert scale) and 3 questions regarding the difficulty, being educative and with descriptive scales. The study carried out in the Centre for Clinical skills located at Firozgar Teaching Hospital affiliated to Iran University of Medical Science.

Results: Seventy-three students (65% female) completed the questionnaire. The results of the study showed that exam was very stressful for 63% of participants. Seventy percent believed that OSCE was easier in comparison to MCQ and Oral. About fifty percent (50%) stated that the time was enough. Majority of students expressed that performing the skills at each station was interesting and educative. OSCE, MCQ and ORAL examination were perceived easy by 52.5, 57.9 and 21.1% students respectively. OSCE, MCQ and oral examination were considered educative by 73%, 20% and 56.9% respectively, and fair by 68.9%, 41.4% and 40.7% respectively.

Conclusion: The findings of this study support OSCE as an acceptable method to assess essentials of practical clinical skills of medical students (JPMA 58:506;2008).

Introduction

The Centre for Clinical skill located at Firozgar teaching Hospital affiliated to Iran University of Medical Sciences has deigned a short training module for medical students during their semiology course. The aim of this training course is to prepare and attain the essential more practical clinical skills before beginning their clinical sessions.

This module consists of essentials skills of: gynaecology & Obstetrics; CPR; taking and reading electrocardiogrammes; heart sound auscultation; lung auscultation; how to use ophthalmoscope to examine the retina; how to apply autoscope to examine the tympanic membrane; and surgical suturing.

Medical students were assessed by OSCE after completing the course. We asked medical students to give us their opinion about the applicability of OSCE compared to Multiple Choice Questions (MCQ) and Oral exam. To the best of our knowledge, OSCE for evaluating semiology, was done first in Iran in our centre.

Methods

The OSCE comprised of a circuit of eight stations, which involved completion of a number of tasks 1) gynaecology and obstetrics 2) CPR 3) ECG reading 4) heart

sound auscultation 5) lung auscultation 6) Retinal examination by ophthalmoscope 7) Tympanic examination by autoscope 8) suturing.

A questionnaire was used having two parts: part 1 contained 10 questions regarding the quality of exam which answered on a 5-point Likert scale (1=strongly disagree, 5=strongly agree); part two consisted of 3 questions regarding the difficulty, being educative and reliability in comparison to MCQ and Oral examination with descriptive scales.

Results

Seventy three students completed the questionnaire. Sixty five (65%) percent were females. The majority of students agreed that the exam was designed fairly. Nearly 70% believed that the most basic skills were assessed by the exam. Sixty three (63%) percent of participants found the exam very stressful. Seventy (70) percent believed that OSCE was easier as compared to MCQ and Oral. Near 70 percent felt that they had received enough OSCE instructions. Majority of participants agreed that each of the evaluated skills were compatible to learned skills. Eighty percent of students found the instructions at each station as expected. About fifty percent (50%) stated that the time was enough. Majority of students were of the opinion that performing the skills at each station was interesting and educative (Table). OSCE, MCQ and ORAL examination

Table: Quality of performance testing.

	Agree (%)	Some agree (%)	Some disagree (%)	Disagree (%)
Exam designed fairly	46.5	43.7	70	2.8
The most basic skills were assess through exam	28.2	42.3	22.5	7
Exam organized properly	40.8	38	16.9	4.2
Exam was so stressful	34.3	28.6	20	17.1
Exam was easier than MCQ and Oral	32.8	37.3	22.4	7.5
I received enough information before pass the exam	34.3	37.1	20	8.6
Each of the evaluated skills were compatible to learned skills	34.7	36.1	22.2	6.9
The instruction of each station to be expected	44.4	36.1	12.5	6.9
The time was enough for each station	25.4	29.6	21.1	23.9
Performing the skills at each station was interesting and educative	33.3	37.5	13.9	15.3

were perceived as easy by 52.5, 57.9 and 21.1% students respectively. OSCE, MCQ and oral examination were considered educative by 73%, 20% and 56.9% respectively. OSCE, MCQ and oral examination were declared fair by 68.9%, 41.4% and 40.7% respectively.

Discussion

Medical students perceived OSCE as an acceptable method and fair examination in comparison to MCQ and Oral examination. Excellent levels of acceptance of the OSCE by students have been described previously in literature¹⁻⁵. The results of this study showed that the medical students had positive attitudes towards OSCE as an alternative method to assess the semiology course.

Although 62.9% of students felt that the OSCE was very stressful, 70.8% of them perceived it as interesting and educative. Other studies regarding student attitudes during the OSCE have documented that the OSCE can be a strong anxiety-producing experience, and that the level of anxiety changes little as students progress through the examination⁵. Almost half of participants in our study stated that the time was not enough, however the average allocated time for each station was 5-8 minutes. The results of this

study showed that MCQ and OSCE were easier than Oral examination. OSCE was more educative than MCQ and Oral examination. However this difference was more prominent between OSCE and MCQ. Students perceived OSCE to be fairer than MCQ and Oral examination to which they were exposed.

Conclusion

The results of this study support our idea that OSCE could be employed as an acceptable method to assess essentials of practical clinical skills for medical students.

References

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