The Objective Structured Clinical Examination: A study on satisfaction of students, faculty members, and tutors

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Abstract: Introduction: Objective structured clinical examination (OSCE) is a valid and reliable instrument for effectively assessing medical students' training activities. Students' and examiners' satisfaction is an important part of the process. The purpose of this study was to investigate students' and examiners' opinions about the audiology exam in Ahvaz Jundishapur University of Medical Science. **Methods:** Fifty-two people, including students and faculty members in the field of audiology and instructors, participated in the survey. The test was divided into 10 sections, with five-10 minutes allocated for each test section. Participants were asked their opinion about the facilities and equipment used in the test section, the physical environment for the test, the answer sheet in each section, standardized patients, selected patients, time allocated for each section, and the examiners' method. **Results:** The majority of students and examiners preferred OSCE to conventional methods. Highest satisfaction in both groups was related to the equipment, and the lowest satisfaction was related to the time allotted to each test section.
Conclusion: It is better to use the OSCE method than conventional method to evaluate the end-of-semester training course. The time allocated to each test section should be increased.

1. Introduction

Currently, methods of assessing students examine knowledge and competence (1). Objective Structured Clinical Examination (OSCE) is a performance-based test (2) and a strategy for evaluating communication skills, critical thinking, problem-solving ability, practical skills, and the decision making (3). Studies have shown that a compared to conventional evaluation method, OSCE is a better tool (4).

Teaching clinical skills at the international level is growing, but written tests assess only students' cognitive ability and cannot evaluate students' actual behavior in clinical settings (5). OSCE is one of the best methods for student evaluation. Student and examiner both play an important role in conducting a good OSCE test, so it is important to satisfy both groups. In this test, a sense of injustice and resentment of the practical test is reduced. In Bolhari' study, all examiners believed OSCE sections can measure the student's skills, while only 43 percent believed that the section can measure the student's knowledge (6). In a satisfaction survey conducted by Hatala, et al., the majority of students believed that a sense of patient continuity is created in this test (7). In this study, we tried to survey the audiology students' opinions of Ahvaz Jundishapur University of Medical Sciences on an OSCE test.

2. Material and Methods

2.1. Context

At the end of each semester, clinical skills of audiology students are assessed. This evaluation was conducted in the traditional way for many years, but since early 2012, the OSCE method has been used. The test for these individuals includes the 10 section (case history, audiologic interpretation, otoscopy, immittance audiometry, pure tone audiometry, masking, tuning fork tests, site of lesion tests, audiogram interpretation, decision-making, and consultation). Time duration of each section is between five and 10 minutes. Testers were faculty and instructors in the audiology department.

2.2. Participants

All third and fourth-year audiology students in Ahvaz Jundishapur University of Medical Sciences (43 students) and members from the audiology department (9 persons) participated in the survey.

2.3. Instrument

The tool was a questionnaire that assesses the satisfaction about facilities and equipment used in the test station, physical environment of the test, answer sheets for each section, standardized patients,

introduced diseases, time allocated for each section, and methods of monitoring the examiners in each section. The participants were asked to express their views in a five-point Likert scale for each item with a range of 1-5 for very low to very high satisfaction. At the end of the questionnaire, participants were asked to respond to a Yes/No question to indicate whether OSCE test is a better alternative than the traditional method.

3. Results

Fifty-two questionnaires were completed by 43 students and nine examiners. All examiners were highly satisfied with the condition of the equipment and diseases listed in each section while only 26 students (60.5 percent) said they were highly satisfied with the equipment. Most dissatisfaction in both groups was related to the duration of each section.

Table1. Satisfaction of OSCE items in examiners and students

Items	n=9 (examiners)			n=43 (students)			n=52 (total respondents)		
	Level of satisfaction			Level of satisfaction			Level of satisfaction		
	Very high and High	Moderate	Low and Very low	Very high and High	Moderate	Low and Very low	Very high and High	Moderate	Low and Very low
	N (%)								
Equipment	9(100)	0	0	26(60.5)	8(18.6)	9(20.9)	35(67.3)	8(15.4)	9(17.3)
Physical environment	5(55.56)	4(44.44)	0	19(44.2)	12(27.9)	12(27.9)	24(46.2)	16(30.8)	12(23)
Answer sheets	8(88.89)	1(11.11)	0	20(46.5)	12(27.9)	11(25.6)	28(53.8)	13(25)	11(21.2)
Standardized patient	7(77.78)	2(22.22)	0	22(51.2)	12(27.9)	8(18.6)	29(55.8)	14(26.9)	8(15.4)
Introduced diseases	9(100)	0	0	15(34.9)	18(41.9)	10(23.3)	24(46.2)	18(34.6)	10(19.2)
Time duration in stations	5(55.56)	3(33.33)	1(11.11)	8(18.6)	6(14)	29(67.4)	15(28.8)	7(13.5)	30(57.7)
Manners of monitoring and the examiners	8(88.89)	1(11.11)	0	24(55.8)	12(27.9)	7(16.3)	32(61.5)	13(25)	7(13.5)

Results of the satisfaction survey are shown in Table 1. Participants in the survey were asked whether the clinical exam using OSCE style is better than a traditional style, which had been used in the previous semester. Sixty-five percent of students (28 students) assessed OSCE better than traditional tests, which had been used in their previous semesters, while the rate for examiners was 88 percent (eight people).

Fisher's exact test and Chi-square test were used to examine the differences between students' and examiners' views. There was a significant difference between the views of these two groups on satisfaction with the test equipment, the questionnaire forms, the section length, the introduced diseases in each section, and examiners assessed these items higher than students at a significance level of 0.05.

A comparison of the views of third and fourth-year students found no significant differences between the views of these two groups on six items in the survey, and the only significant difference was observed in the level of satisfaction with introduced diseases in the sections, and third-year students were more satisfied with the diseases listed in this test (p = 0.024).

4. Discussions

The main objective of the study was to examine students' and audiology members' satisfaction level of the OSCE test. Most participants in the study were satisfied with the test, and they preferred this test to traditional appraisals. Of course, the examiners generally had more positive views than the students about the various items on the test. In Erfanian and Khadivzadeh' study, 80 percent of midwifery students of Mashhad University of Medical Sciences (Iran) said that they are highly and very highly satisfied with the OSCE test. The OSCE had 10 sections for 62 students (8). In the Kurz survey, nursing students and faculty declared their high satisfaction with the OSCE format (9). Huang, et al., asked medical students to rate the OSCE in a five-point Likert scale. Eighty percent of them selected satisfied and very satisfied instead of dissatisfied, very dissatisfied, and neutral. Satisfaction was for all aspects of OSCE, including exam content, exam atmosphere, and improvement in clinical skills after the exam, standardized Patient performance, and overall satisfaction with the exam. In Huang's study, students had little satisfaction with the test environment due to noise interference in other sections of the test (10). This option in our

study earned 55 percent satisfaction from examiners and 44 percent satisfaction from students.

In our study, the highest level of satisfaction among audiology students was with the equipment used in OSCE (60 percent). Satisfactions with the manner of supervision and examiners, and also with the standardized patient satisfaction were 55 percent and 51 percent, respectively. However, the majority of students were dissatisfied with the allotted time for each section, and only 18 percent of them assessed the time as appropriate while 55 percent of the examiners stated their satisfaction with the allotted time. It seems that due to disagreement between examiners and students on the test equipment, response forms, time duration in the section, and diseases introduced in each section, it is necessary to conduct a review of these items to achieve students' satisfaction.

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