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Objective Structured Clinical Examination (OSCE)—Does It Measure The Real Performance? : Students' Perception

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Abstract: Objective Structured Clinical Examination (OSCE), although originally used in the field of medicine, has been widely adopted now in nursing colleges or institutions as a part of their assessment strategy in the implementation of their organized nursing training for the students. However, there are instances when it has been prudently commented among the students who have been participating in the examination. In an effort to draw in justified information, a study is done with the objective of eliciting the perceptions of the nursing students over the probability as to whether OSCE really measures the real performance of its candidates. The two groups of students participated in the study were from the same Nursing University College. A group of forty students representing semester 8 were those who had been participating in six previous OSCE performances, while the other forty from semester two had only experienced one OSCE session and that was when they were at the end of their Semester one. The perceptions from these senior and junior groups are important, taking into account the level of their varied involvement in the examination which ultimately will reflect on the readiness of their emotional and mental status to be confronted with such examinations. Questionnaires for the quantitative study were designed mostly based on the overall purposes of OSCE itself. Nine close ended questions were formulated (requiring options of strongly agree to strongly disagree answers) with an additional of two open-ended question where the students are invited to write their comments and recommendations.

Keywords: Objective Structured Clinical Examination, Nursing students, Emotional and mental status, Perception.

1. INTRODUCTION

Objective Structured Clinical Examination (**OSCE**) is a form of performance-based testing used to measure candidates' clinical competence. During an OSCE, candidates are observed and evaluated as they go through a series of stations in which they interview, making clinical judgment and perform procedures on the standardized patients (OSCE models) who present themselves with some types of health problems.

Although originally used in the field of medicine, OSCE has been widely adopted now in nursing colleges or institutions as part of their assessment strategy in the implementation of their organized nursing training for the students.

Based on students' commentary feedback on previous OSCEs, an effort to draw in justified information was made through a study involving forty semester two students and another forty from semester eight (total of 80 participants) of a University Nursing College. Conformance to ethical requirement and confidentiality aspect was observed.

The findings had shown that although the students had agreed to the fact that OSCE was indeed a beneficial exercise but perception-wise they claimed that it did not measure their real performance. Collectively the contributory factors were said to be concerning with time allocation factor, anxiety-stricken emotions and commentary disturbances by invigilators, among other given views. It was recommended that a further study to be done to compare an OSCE with the presence of



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invigilators in the stations and the other one with the invigilators placed behind unrevealing glasses where the students would not be able to see them.

AIM:

Eliciting the perceptions of the nursing students over the probability as to whether OSCE really measures the real performance of its candidates

OBJECTIVES:

To determine whether OSCE measures the real performance of the students *and* to identify the influencing factors affecting student's ability to perform

2. METHODOLOGY

9 exploratory close ended questions were constructed using a four point Likert Scale arranged from 'strongly agree' to "strongly disagree' manner, while 2 open ended questions were designed for the students to express their individual feeling towards OSCE.

The questions were divided into four areas of concern:

1. The benefits of OSCE.

- 1.1 Overall OSCE was a very worthwhile exercise
- 1.2 OSCE experience was valuable and educational.
- 1.3 OSCE reflected the learning objective of the topics/subjects concerned.
- 1.4 OSCE is able to assess current knowledge of student.

2. Appropriateness of OSCE structure

- 2.1 Appropriateness of time provided.
- 2.2 Useful feedback from stations (invigilators).

3. Factors influencing OSCE outcome.

- 3.1 OSCE does not permit an accurate assessment of my strength and weakness.
- 3.2 The artificial structure of OSCE made it impossible for me to demonstrate my ability.
- 3.3 OSCE was too anxiety-provoking

4. Open-ended questions.

- 4.1 What do you think can be done to improve future OSCE?
- 4.2 Do you think OSCE should be video-taped to enable a replay?

3. FINDINGS

Feedback obtained from the students were summed up to give the results under two different categories, one of which is to denote the perceptions of semester eight students while the other one is for semester two students.

Table 1: Feedback on the questionnaires from both semester 8 and semester 2 students

			Semester 8		Semester 2	
Question	OSCE Describtions	status	Frequency	Percent	Frequency	Percent
1.	Overall OSCE was a	strongly agree	19	47.5	20	50.0
	very worthwhile	agree	19	47.5	18	45.0
	exercise	disagree	2	5.0	2	5.0
		strongly disagree	-	-	-	-



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		Total	40	100.0	40	100
2.	OSCE experience was	strongly agree	25	62.5	23	57.5
	valuable and	agree	14	35.0	14	35.0
	educational	disagree	1	2.5	3	7.5
		strongly disagree	_	-	_	_
		Total	40	100.0	40	100
3.	OSCE reflected the	strongly agree	24	60.0	23	57.5
J.	learning objectives of	agree	15	37.5	16	40.0
	the topics/subjects	disagree	1	2.5	1	2.5
	concerned		-	2.3	-	2.3
	concerned	strongly disagree				
		Total	40	100.0	40	100
4.	OSCE is able to assess	strongly agree	26	65.0	19	47.5
	current knowledge of	agree	13	32.5	17	42.5
	student	disagree	1	2.5	3	7.5
		Strongly disagree	-	-	1	2.5
		Total	40	100.0	40	100
5.	Appropriateness of time	strongly agree	3	7.5	6	15.0
	provided.	agree	6	15.0	12	30.0
		disagree	24	60.0	12	30.0
		strongly disagree	7	17.5	10	25.0
		Total	40	100.0	40	100
6.	Useful feedback from	Strongly agree	-	-	7	17.5
	stations (invigilators).	agree	4	10.0	10	25.0
	, , , , , , , , , , , , , , , , , , ,	disagree	27	67.5	21	52.5
		strongly disagree	9	22.5	2	5.0
		Total	40	100.0	40	100
7.	OSCE does not permit	strongly agree	9	22.5	5	12.5
	an accurate assessment	agree	25	62.5	15	37.5
	of my strength and	disagree	5	12.5	17	42.5
	weakness	strongly disagree	1	2.5	3	7.5
		Total	40	100.0	40	100
8.	The artificial structure	strongly agree	11	27.5	10	25.0
	of OSCE made it	agree	22	55.0	9	22.5
	impossible for me to	disagree	7	17.5	19	47.5
	demonstrate my ability.	strongly disagree	- 40	100.0	2	5.0
9.	OSCE was too anniet-	Total strongly agree	40 33	100.0 82.5	40 33	100 82.5
	OSCE was too anxiety- provoking	agree	5	12.5	3	7.5
	provoking	disagree	1	2.5	3	7.5
		strongly disagree	1	2.5	1	2.5
		Total	40	100.0	40	100

Comparatively both the students from semester two and semester eight had almost the same perceptions where they agreed that OSCE is said to be a very worthwhile exercise, its experience was valuable and educational, it reflected the learning objectives of the topics/subjects concerned and that OSCE was too anxiety provoking. Their rating was also almost the same in disagreeing with the statement of "useful feedback from stations (invigilators)".

However their opinions differed tremendously where the "appropriateness of time provided for OSCE" was concerned, when 60% of semester eight students disagreed versus only 30% of semester two students who disagreed. The same goes for "OSCE does not permit an accurate assessment of my strength and weakness" and the "artificial structure of OSCE made it impossible for me to demonstrate my ability" where majority of semester eight students were agreeable compared to those of semester two students.



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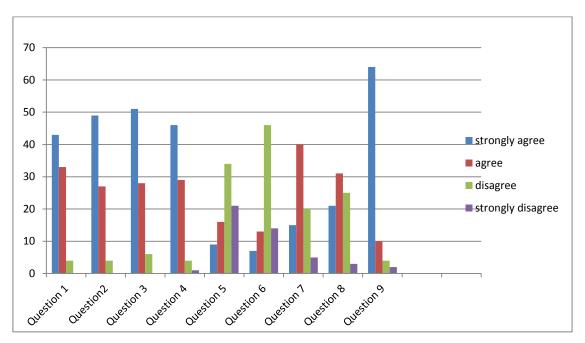


Fig. 1: Students' evaluation of the OSCE - General View From Both Semesters (8 and 2)

RESPONSES TO FREE TEXT QUESTION OF WHAT COULD BE DONE TO IMPROVE FUTURE OSCE:

- 1. To give more time for them to perform the OSCE tasks
- 2. To give feedback regarding performance after OSCE To avoid interrupting students when they were doing the procedure
- 3. To inform marks immediately after OSCE
- 4. Invigilators not to show angry or dissatisfied expressions if the students performed wrongly
- 5. To prepare and give sample questions and let the students to practice more prior to OSCE
- 6. More good lecturers are needed for OSCE
- 7. To avoid interrupting students during OSCE
- 8. To make the room situation more comfortable for the students
- 9. Lecturers must always be alert and observant to avoid asking students to repeat certain parts of the procedure
- 10. To allocate familiar lecturers so as to avoid stress and anxiety among students
- 11. To replace old equipments which would affect OSCE performance
- 12. To allow the use of both English and Malay languages

Regarding the need to video tape the OSCE performance:

- 1. Semester-two students (28) disagreed as it will incur more anxiety during OSCE.
- 2. Semester-eight students (34) agreed as it could be replayed if and whenever the need arises.

4. DISCUSSION

95% of the respondents acknowledged that the experience gained from going through **OSCE was indeed valuable, educational and managed to reflect the learning objectives of subjects concerned.** 94% vouched that OSCE had the ability to **assess the current knowledge of the students** with 46 (58%) and 29 (36%) dwelling on the 'strongly agreed' and 'agreed' status respectively.



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34 (43%) disagreed and 21 (26%) strongly disagreed with the **5 minutes time limit** being allocated for each task or procedure they had to perform during OSCE and suggested for it to be increased to ten minutes. They also preferred to **be made known of their performance before leaving each station** so as to avoid lingering anxiety and stressful feeling.

55 (69%) of the students agreed that OSCE did not actually permit an accurate assessment of their strength and weaknesses, 52 (65%) declared that the artificial structure of OSCE made it impossible for them to demonstrate their real ability while 74 (93%) agreed that OSCE was too anxiety provoking. Other influencing factors include the unfriendly expressions and remarks made by the invigilators. The invigilators on the other hand, being very near to the participants would sometimes unintentionally show uncanny expressions especially when the students indulge in something that might endanger their standard patients.

5. CONCLUSION

Suggestions given by the respondents to improve OSCE should immediately be looked into and relevant changes should be done to improve future OSCE. On the suggested time factor for procedures given during OSCE, it can be made relevantly appropriate, adhering to the complexity of the procedures themselves. However, students must conform to the allocated time given as OSCE is a platform for them to exercise their competencies and abilities in performing given tasks. Replacement of old or malfunctioned equipments should be given high priority as it will affect the procedural flow and their outcome. The use of dual languages of English and Malay during OSCE as suggested will not be recommended as the medium of instruction for the institution is English.

OSCE should be continued to be used by the institution as a mean to assess the practical aspect of learning ability although majority of the respondents had presented their view that OSCE actually did not measure their real performance. OSCE can be dependable in assessing the transference of knowledge gained by the students to its applicability to ensure they are in the right path towards giving quality service upon graduation.

Nevertheless, continuous improvement must be done to make OSCE be at par with the current situational demand since nursing is a dynamic entity and simultaneously progressing with the diversified forth-coming challenges as well as the introduction of new technological development in terms of equipments and procedures.

6. RECOMMENDATIONS

This study can be considered as a reference material to similar nursing educational settings with identical problems and situational issues

A future study can also be pursued to compare the effectiveness in measuring the real performance of the students by segregating the invigilators and the candidates from being visibly in contact with each other. It is proposed that the invigilators should be placed in an area where they could clearly see the candidates performing the OSCE but they themselves would not be seen by the candidates.

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