

Nursing Students Perceptions of an Objectives Structured Clinical Examination

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Abstract: The aim of the study was to assess the perceptions of third-year nursing students about OSCE as a new clinical assessment method. **Methodology:** Cross sectional study was carried out on the students who participated in the OSCE. Data was collected from 55 nursing students by a Self-explanatory questionnaire immediately after students completed the examination. **Results:** 87.3% of the students agreed that task performance during OSCE was educational and interesting; the majority of the students (89.1%) preferred OSCE over other forms of assessments. However, 78% perceived OSCE to be a stressful experience and the preparation requires considerable effort by both students and faculties. Students, also were asked to rate the different assessment methods in terms of degree of learning, fairness and difficulty. The results revealed that the majority of the students (67.3%) reported that they prefer OSCE over the traditional evaluation methods. Furthermore, 43.6% of the students considered OSCE fairer and 50.9% students believed that OSCE is the easiest method of assessment as compared to the other formats.

Conclusion: OSCE was accepted and perceived positively by undergraduate nursing students as a new method to assess clinical skills. Certain negative perception such as stress was highlighted, which could be managed through better orientation and preparations.

Keywords: OSCE, Student Perception, Clinical Assessment Method, competency.

I. INTRODUCTION

Clinical nursing education is the heart of a nurse's professional practice and therefore the evaluation of nursing students' clinical competencies is critical to their education. In order to develop and actively respond to rapidly changing health environments, the nurses should be trained in the current standards and advances and must possess excellent nursing skills [1].

Assessment of clinical competence is an essential component of health professions education, requiring educators to informed decisions that measure students' clinical knowledge and skills accurately [2]. The objective structured clinical examination (OSCE) has been in use in the assessment of medical students for over 20 years it was introduced by Harden in 1975. Since its inception, the OSCE has been increasingly used to provide formative and summative assessment in various medical disciplines worldwide, including non-clinical disciplines [3], OSCE is one form of objective evaluation method that is gaining more importance and is being adopted by educators of various disciplines especially when the merits of OSCE outweigh the demerits and motivates student learning [4]. OSCE addresses various learning objective and assesses their achievement, at the same time, the interaction with patients during nursing activities gives a realistic experience to nursing students, and memories of successful practices can be stored in students' knowledge systems [5].

Furthermore, as a method of clinical skills assessment, the OSCE possesses a number of intrinsic advantages. Firstly, it can include both summative and formative components, in which a judgment or evaluation of an individual's performance is made (summative) followed by the provisional feedback, from which the student can learn (formative) [6]. Secondly, because each student is required to demonstrate specific behaviours in a simulated work environment, strict control over

the clinical context is possible, while at the same time, reflecting real-life professional tasks. This control eliminates the 'luck of the draw' problem that arises when students are assessed within the 'real-world' clinical environment with actual patients as well as the risk of harm occurring to a patient [7]. The underlying premise is that such standardised procedures ensure objectivity and maximise reliability in assessment [8], [9].

The traditional format of examination that included long and short cases with oral examinations was preserved until recent changes in the Nursing Department at Prince Khalid Bin Sultan college curriculum. In response to recommendations to improve the validity and fairness of the examination through adoption of proven reliable methods and approaches in assessment and evaluation in nursing education, the Department of Nursing, Prince Khalid Bin Sultan College initiated the OSCE as a formal method of assessment for the final examinations in the nursing clinical courses for third year students in December 2013. Students and faculty were exposed for the first time to a relatively new assessment method in which all major areas of competence were assessed in a structured, formal manner.

The aim of this study was to assess undergraduate nursing students' perceptions and acceptance of OSCE as a new method of clinical competency assessment in undergraduate nursing curriculum and to determine student acceptability of the process and provide feedback to enhance further development of the assessment.

II. METHODS

Cross sectional study was carried out on the students who participated in the OSCE. The study sample included all third-year undergraduate nursing students both males and females (N=65) at Prince Khalid College, Nursing Department, who were taking the final practical exam for the 2013-2014 academic year. No sampling was done as the total population (65) was included in the study. A total of 55 completed questionnaire for an overall response rate of 84.6%.

For the purpose of this study, 12 items questionnaire with three domains modified from Pierre et al., 2004. The questionnaire was administered immediately after all students completed the examination. Face validation of the questionnaire was done by experienced faculties. The questionnaire was piloted before actual administration to address any ambiguities. It had three parts; part one contain eight questions regarding the quality of exam which answered on A four- point Likert type scale. Part two consisted of three items to rate the different assessment methods (OSCE, MCQ, Essay, and Case study) in terms of degree of learning, fairness and difficulty. Part three had one item only regarding the acceptability of the OSCE as method to assess clinical skills for nursing students.

The statistical package for social sciences (SPSS) version 20.0 for windows was used for statistical analyses. Descriptive statistics were calculated to determine frequencies, mean and standard deviations.

The study was approved by the Dean of the Prince Khalid College and the Nursing Department Ethical Committee. Students who agreed to participate signed a consent form and completed the self administered questionnaire. They were assured that information they provided would remain confidential and their identity would not be disclosed, and that if they chose not to participate, they would not be penalized.

The examination committee compiled an OSCE guideline, which included information on conducting the assessment itself and the relevant information on the time allocated for all possible procedures. In an attempt to give the students a proper experience of the assessment process, a practice review and how the OSCE would operate were organized two weeks before the exam. Adequate preparation and familiarisation for students was during the Mock OSCE; particularly with regards the nature of the OSCE at each station and the process of the examination. The assessment strategy was also discussed with the students, students also were encouraged to ask questions and discuss pertinent issues around the OSCE. It was clear that the students who had been through a proper practice felt more prepared, relaxed and ready for the OSCE.

The OSCE stations consisted of a series of 12 stations, about 6 minutes each. In each station candidate was examined on a one-to-one basis with one examiner with either real or simulated patients (standardized patient or dummies). To overcome the limited number of a simulator in the skill labs, standardized patients were used in the OSCE. In stations where standardized patients were used, detailed scripts were provided to ensure that the information that was given consistent to all candidates, which also included the emotions that the patient portrayed during the examination.

III. FINDINGS AND DISCUSSION

A total of 55 third year nursing students participated in this study. The majority of the respondents were female (85.5%; 47/55). Table (1) represents nursing students' perception of OSCE attributes. The results revealed that 72.7% of students perceived OSCE as fair, 85.4% of the nursing students felt that the exam was well administered, and that the stations were arranged in an organised and well-sequenced order. These findings were similar to the views of the students at of West Indies medical school [10].

The majority of the students (78.1%) had experienced stress. A similar study conducted in Egypt by Mahmoud & Mostafa, [11], discovered that 52.7% of the respondents had found the OSCE examination to be more stressful than a written examination, although the respondents had been prepared adequately for the examination. In a qualitative study conducted in the U.K., Fidment [12] discovered that anxiety forms a key theme in a student's experience. Studies surveying 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 examination [13]. The main challenge raised by students was stress during the exam. This study provided valuable feedback in the process of refining and standardizing the format in the department. These feelings of stress need careful consideration and subsequent management by academic faculty. In some respects, stress can also have positive effects on the student, in focussing attention and utilising coping strategies to manage the situation.

TABLE 1: OSCE Evaluation

Survey Items	Degree of Response			
	Strongly Agree N%	Agree N%	Disagree N%	Strongly disagree N%
1. Exam was fair	12.7	72.7	12.7	1.8
2. Exam organized properly	21.8	63.6	12.7	1.8
3. Exam very stressful	23.6	54.5	16.4	5.5
4. Exam was easier than oral	14.5	47.3	25.5	12.7
5. Students received adequate information before appearing in the exam.	9.1	76.4	12.7	1.8
6. The instruction of each station were as expected.	9.1	76.4	9.1	5.5
7. The time was enough.	10.9	43.6	32.7	12.7
8. Performing of tasks at each station was interesting and educative.	9.1	78.2	10.9	1.8

Most of the students, 87.3% ($n = 48$) viewed the performance of tasks during OSCE was interesting and educative. However, exams are a well-known source of stress and OSCEs in particular are regarded as quite stressful, although it has been suggested elsewhere that an OSCE is less stressful to students than previous examination experiences. Therefore, the introduction of a new examination may have been seen as a rather threatening experience.

Thirty four of the students (62%) felt that the OSCE was easier than case presentation.

The majority of the students (85.5%) indicated that they received sufficient information about OSCE from their lecturers and were fully aware of the nature of OSCE prior to the examination. It is shown in the literature that the information provided beforehand is regarded as being of utmost importance [12]. Alinier, [14] stated that, in whatever way the OSCE is either planned or used, it is important that the students be clearly briefed and informed about the aims and objectives of the OSCE sessions, as well as whether the sessions will cover an area of content that they already know and students should be allowed to ask questions if they are not confident about the task they are required to perform [14]. Preparation and familiarisation with the OSCE process is recognised as a key issue within the literature [15], [16]. Alinier *et al.* [14]

discussed the importance of adequate preparation for students and particularly with regards to a simulation manikin, recommending no assumptions should be made to students' prior knowledge or understanding of simulation.

It was also necessary to determine whether enough time had been allowed to complete the different procedures. The students who reported that the exam time was enough for each station were (n= 30); meaning that 45.4% of student expressed concerns about inadequacy of time. These concerns are similar to those highlighted by Abraham et al., [17] who reported in a quantitative study that more than 50% of students felt that time were a concern during the exam. In addition, Hasan et al., [18] indicated that although time does seem to be a problem with the exam, it should not become an exercise of how fast students can perform the technique, but rather focus on how well they can perform it. Each station has to be completed within the same length of time, and is run simultaneously, students starting each station at the same time and being required to stop at the same time and then move on to the next station. However, it is essential that the stations be focused so that it is possible to complete specific tasks within a planned time frame [13].

Students were asked to rate the different assessment methods in terms of degree of learning, fairness and difficulty. The results are summarized in Table (2). The majority of the students (67.3%) like OSCE than those observed for Oral (27.3%), Essay (5.5%). OSCE was rated as fairest method of assessments (43.6%). Students also believed that OSCE is the easiest method compared to the other assessment format (50.9%). These results are in agreement with Bartfay et al. and Pierre et al. [10], [19]. A number of authors contend that, when compared to subjective teacher-ratings of student performance or the multiple-choice question test, the OSCE is a superior evaluation of clinical competence, as it facilitates the assessment of a complex repertoire of skills, knowledge and attitudes viewed as the underpinnings required for competent clinical practice [10], [19], [20].

TABLE 2: Students rating of OSCE in relation to the other assessment methods

Item	OSCE %	Essay %	MCQ's %	Case presentation %
Easy	50.9	5.5	7.3	36.4
Educative	65.5	5.5	3.6	25.5
Fair	43.6	20.0	18.6	18.2

The majority of the students (89.1%) confirmed their acceptance of OSCE as an evaluation tool for their clinical skills. Since it covers a wide range of knowledge and is comprehensive, providing key learning opportunities and therefore results of this study indicate that OSCE is an acceptable method to assess clinical skills was consistent with similar studies reported elsewhere [10, 19, 20].

Based on the students' responses to the questionnaire, it is clear that the students responded positively to the OSCE and it was perceived by student to be more fair, educative and less difficult than Essay, MCQs and Case Presentation.

IV. CONCLUSION

Students' perceptions and acceptance of the new method of assessment were positive. Although the implementation of OSCE in the Prince Khalid College, Nursing Department has been challenging due to lack of facilities and experiences; it was viewed as an accepted tool for clinical evaluation. This appears in student feedback which confirmed their acceptance of OSCE, so as to fairness and easiest to cover a wide range of knowledge base proving as an excellent tool for assessment. The OSCE therefore remains a more objective method of assessment than the traditional method that was previously used in this department. However, a larger sample size would perhaps have provided results more representative of the population under study and further studies are required involving the instructors to establish the effectiveness of OSCE within nursing education programs.

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