



Journal Homepage: -www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/18544
DOI URL: <http://dx.doi.org/10.21474/IJAR01/18544>



RESEARCH ARTICLE

PERSPECTIVE ON OBJECTIVE STRUCTURED CLINICAL EXAMINATION AMONG UNDERGRADUATE NURSING STUDENTS

Huldah J.

Manuscript Info

Manuscript History

Received: 15 February 2024
Final Accepted: 19 March 2024
Published: April 2024

Abstract

An important trend in nursing education has been the move to an OUTCOME or COMPETENCY-BASED model, where the learning outcomes are defined and decisions about the curriculum are based on these. The aim of the study was to explore the perspectives of the students regarding OSCE (Objective structured clinical examination). A descriptive survey using 19 item three-point Likert's scale questionnaire was conducted. The study sample consisted of 190 B.Sc., (N) students. 76.31% students were agreed that OSCE is well structured and sequenced, 76.31% students agreed that OSCE represented an objective evaluation method of psychomotor skills and 76.42% students perceived their OSCE experience positively than traditional examination. In conclusion, the OSCE appears to be single "gold-standard" assessment tool for clinical competency. In combination with other assessment methods in the clinical settings, OSCE will provide a more comprehensive student psychomotor skill evaluation. OSCE experience gave new nursing graduates confidence to work as registered nurses in health care settings.

Copy Right, IJAR, 2024,. All rights reserved.

Introduction:-

"OSCE- THE GOLD STANDARD FOR PERFORMANCE ASSESSMENT"

**"The Curriculum tells the staff what to teach.....
The OSCE tells the students what to learn!"**

Assessment of clinical competence is an integral issue in nursing education(clinical aspect). Assessment of clinical practice is long-standing and receives extra attention in nursing education. The assessment tools need to be effective and crucial to initiate active learning. It has been widely accepted that assessment of students' performance and clinical competence, along with the measurement of knowledge, should contribute to the students' overall evaluation since assessment drives learning.

Reliable and valid clinical evaluation should be of a concern to all faculties of nursing and clinical demonstrators. Students need to know the clearly delineated specific objectives by which they are being assessed. One type of clinical assessment which meets these criteria is a performance-based assessment. The Objective Structured Clinical Examination (OSCE) is a type of a performance-based assessment. An essential part of a nursing curriculum is an accurate clinical assessment of nursing students' skills.

The Objective Structured Clinical Examination (OSCE) are used for both formative and summative assessment of practical knowledge and skills in nursing education. In Nursing education, principles of OSCE can be also used in a formative way to enhance skills through simulation. OSCE requires that each student should demonstrate specific skills and attitudes in a simulated clinical environment. OSCE consists of a number of stations that enables students to perform certain skills within a determined time. It comprised of a series of small skills assessment (stations), each of which is assessed by an evaluator using a predefined objective grading scheme. OSCE stations comprises the strategy for evaluating the student's application of knowledge as well as his or her practical skill and attitude; the chance to evaluate their interview decision making and problem-solving skills; and reflect what the student has taught. In addition, to the assessment of student performances on OSCE, areas of strengths and weaknesses in educational programs have been identified. These advantages allowed OSCE to be extensively used in nursing.

Need for the study:

As the investigator experience as Nurse Educator in few Hospitals at Chennai had come across bad practice of the budding nursing officers that compromises clients' conditions. More over the shortage facilities from the clinical sites that could be obstacle the chance of students to perform on clients. Traditional examinations of clinical nursing are not standardized to evaluate clinical performance, and reasoning skills. Nursing students gaining of critical thinking and problem-solving skills are hard to manage with large numbers of students. Moreover, in traditional assessment tool, teachers carrying out the evaluation of student performance tend to give summative grades. So, it is challenging to have such an objective evaluation method to comprehensively evaluate students' practical competencies especially with increased students' number. OSCE should be incorporated within a curriculum in integration with other pertinent student assessment methods. In addition, as a method of practical skills evaluation, the OSCE have a number of benefits.

1. Firstly, it can contain both summative and formative components, in which a judgment or evaluation of student practice is made (summative) followed by the supply of feedback, from which the student can learn (formative).
2. Secondly, as each student is required to perform attitudes in a simulated work environment, a firm control over the clinical situation is possible, and at the same time, reflects professional skills in real-life. This control removes the draw problem that appears when students are evaluated within the hospitals with actual clients and the probability of harm that may occur to the clients.

OSCE are a precious strategy to assess suitability to performance at the students' expected level of practice within a nursing situation where the value of precise patient assessment is essential.

The OSCE method of evaluation (summative) has only been made compulsory recently in the Nursing Department of The Tamilnadu Dr.M.G.R. Medical University, Guindy, Chennai, Tamilnadu and as per the current INC syllabus of B.Sc (Nursing).

The present study is intended to assess the feedback of undergraduate nursing students which includes their perception and attitude about OSCE used for measuring clinical competence during final nursing courses examinations in nursing foundations, medical and surgical nursing, pediatric nursing, midwifery and obstetrical nursing, mental health nursing and community health departments in order to supply an guide that supports probability of its use in nursing for enhancing students' outcomes and to bring out the competent nurses to the society.

Statement of the problem:

A descriptive study to assess the perspectives on OSCE among B.Sc., (N) students

Objectives of the study:-

1. To assess the perspectives on OSCE among undergraduate students.
2. To associate the demographic variables with the perspectives on OSCE among undergraduate students.

Hypothesis:

There is a significant association between the demographic variables with the perspectives on OSCE among nursing students.

Research Methodology:-

A quantitative approach with the descriptive survey design was selected to assess the perspectives on OSCE among B.Sc., (N) students. The study was conducted at Venkateswara Nursing College, Chennai and selection of college was done by convenient sampling. The sample comprised of 190 undergraduate nursing students and selected by purposive sampling. 47 students from first year, 48 students from second year, 48 students from third year and 47 students from fourth year were selected for conducting the study.

Tool for data collection was structured questionnaire for collecting the information about the demographic data, semi structured Likert's scale questionnaire for assessing the student's perspective on OSCE. Reliability of the tool was estimated by split half reliability method by administering questionnaire to 10 samples and reliability coefficient was 0.73 and it was found reliable.

Data was collected in the month of June 2018. Formal administrative approval was obtained and 190 samples were selected by purposive sampling. Informed consent was taken from the subjects before administering tool to the students. The purpose of the study was explained and confidentiality was assured. The selected subjects were given the tool and asked to fill the questionnaire to assess the perspective on OSCE in 30 minutes. The procedure for the data collection was found to be satisfactory. Descriptive and inferential statistics were used to analyze the data.

Results:-

Demographic Characteristics:

Considerable number of students (72.10%) were aged between 18- 20 years (Table 1). Majority of the students (82.10%) were females. Maximum of the students (25.26%) were equally distributed in 2nd and 3rd year.

Table 1:- Distribution of students by demographic characteristics (N= 190).

Sl.No.	Sample Characteristics	Frequency	Percentage (%)
1	Age in years		
	a. 18-20	137	72.10
	b. 21-23	53	27.89
2	Gender		
	a. Female	156	82.10
	b. Male	34	17.89
3	Year of education		
	a. 1 st year	47	24.73
	b. 2 nd year	48	25.26
	c. 3 rd year	48	25.26
	d. 4 th year	47	24.73

Students' opinion regarding OSCE:

Table (2) reveals highest percent (76.31%) of the students were agreed that structure and format of OSCE were adequate, uniform, covered all type of questions, well organized, well-structured and sequenced. Table (3) shows Majority (76.42%) of the students were stated that conduction of OSCE was stress free. Table (4) indicates Maximum (74.81%) of the students agreed that evaluation of OSCE reduces subjectivity, reflects the level of performance, eliminates factor of luck, scoring was transparent and objective, result gives confidence, reduces chance of failure and allows more opportunities to learn than the traditional format.

Table 2:- Students' opinion regarding structure and format of objective structured practical examination.

Sl.No.	ITEMS	Agree	Uncertain	Disagree
1	Instructions were adequate	81.57%	10.52%	7.89%
2	Opportunity for clarification	48.94%	22.63%	6.84%
3	Uniformity of questions	78.94%	13.68%	7.36%
4	Examination covered all types of questions	75.26%	15.26%	9.47%
5	Well-structured and sequenced	81.05%	14.73%	4.21%

6	Time allocation was appropriate	64.73%	17.89%	17.36%
7	Examination was well organized	82.10%	13.68%	4.21%
TOTAL		76.31%	15.48%	8.19%

Overall Perspective On Osce Among Undergraduate Nursing Students

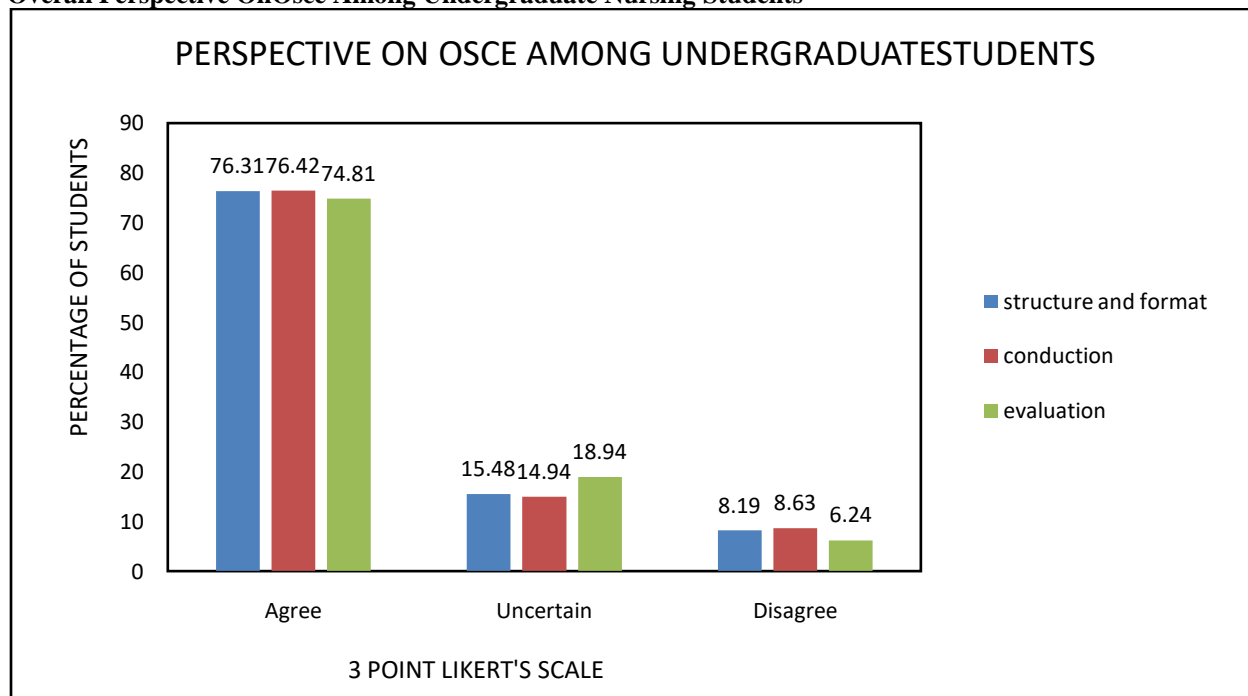


Table 3:- Students' opinion regarding conduct of objective structured practical examination.

Sl.No.	ITEMS	Agree	Uncertain	Disagree
1	Examination format was more stress free	64.21%	23.15%	12.63%
2	Variety of structured templates	75.26%	20.52%	4.21%
3	Teacher's absence at stations was fright free	80.52%	10%	9.47%
4	There is no interruption in the stations	83.15%	10.52%	6.31%
5	The presence of examiner on each station facilitated the exam	78.94%	10.52%	10.52%
TOTAL		76.42%	14.94%	8.63%

Table 4:- Students opinion regarding evaluation of objective structured practical examination.

Sl.No.	ITEMS	Agree	Uncertain	Disagree
1	Examination reduces the subjectivity	73.15%	18.42%	8.42%
2	Examination reflects the level of performance	83.15%	14.21%	2.63%
3	OSCE eliminates factor of luck	71.05%	20.52%	8.42%
4	Result format gives confidence	72.10%	23.15%	4.73%
5	Scoring was transparent and objective	75.78%	18.42%	5.78%

6	This format reduces chance of failure	70.52%	21.05%	8.42%
7	Allows more opportunities than the traditional format	77.89%	16.84%	5.26%
TOTAL		74.81%	18.94%	6.24%

Association of selected factors with perspective of OSCE:

There was a significant association between gender and perspective on OSCE as shown by the obtained chi-square value (6.951) which is smaller than the table value (5.991) at 2 df and 0.05 level of significance (Table 5). Therefore it is concluded that gender and perspective on OSCE among undergraduate nursing students had a significant association. Thus the hypothesis was accepted.

Table 5:- Association between perspective on OSCE and selected factors (N=190).

Sl.No	Selected Variables	Agree		Uncertain		Disagree		Chi- square value
		n	%	n	%	n	%	
1.	Age 18-20 years	104	54.73	21	11.05	12	6.31	$\chi^2=0.0218$ df=2, p=0.989 non-significant (N.S)
	21-23 years	40	21.05	8	4.21	5	2.63	
2.	Gender Female	122	64.21	24	12.63	10	5.26	$\chi^2=6.951$ df=2, p=0.309 Significant
	Male	22	11.57	5	2.63	7	3.68	
3.	Year of education 1 st year	40	21.05	4	2.10	3	1.57	$\chi^2=7.661$ df=6 p=0.26 non-significant (N.S)
	2 nd year	40	21.05	5	2.63	3	1.57	
	3 rd year	33	17.36	10	5.26	5	2.63	
	4 th year	31	16.31	10	5.26	6	3.15	

Discussion:-

In this study, 64% of the students expressed their opinion that the OSCE test was a more stress less assessment. Moreover, 75% percent of the students felt that the final OSCE process was fair, more objectivity, more transparent evaluation but 65% of the students reported that the time allocated to each station was not satisfactory. These results were consistent with many studies that a considerable percentage of students viewed OSCE as a way to enhance skills through simulation.

In relation to the students' perspective regarding the OSCE system, more than half of the students indicated that the OSCE system is credible, consistent, reliable, enhances the teaching level, allows more opportunities to learn than traditional form of examination. The findings were somewhat similar to the view of students at Cairo and Ain Shams Universities of Egypt. However, the nursing students' perspective was positive in some area but seemingly, the OSCE had few limitations including insufficient time for each station that, in some studies, was one of the students complains and stressful.

The traditional final examination is not a suitable tool in the evaluation of the clinical competence in nursing education. In this study, the students' evaluation of OSCE was encouraging. I would like to recommend the OSCE; it could be used to evaluate the skills of undergraduate in the future final examination. It requires the consideration of validity and reliability of the process for undergraduate nursing students.

Conclusion:-

In spite of being stressful, OSCE is considered as fair and better method of examination by students as it covers wide range of skills and improves the clinical knowledge. This wide acceptance of OSCE by students could increase the satisfaction of all stakeholders involved in nursing students' assessment. OSCE is an effective and valid assessment method for assessing students' clinical competencies and it should be used. Effective preparation and proper orientation of students with OSCE to reduce stress, anxiety and improve their experience.

References:-

1. Harden RM, Stevenson M, Downy WW, and Wilson GM. Assessment of clinical competence using objective structured examination. *Br. Med. J.* 1975; 1(5955): 447-51.
2. Bakhsh TM, Sibiany AM. Comparison of students' performance in the traditional oral clinical examination and the objective structured clinical examination. *Saudi Med J.* 2009; 30:555–557. [PubMed]
3. Tabatabai K, H BSM. Medical students viewpoints about the evaluation methods at internship stage (Mashad University 2001) MUMS. 2002; 45:97–103.
4. Shoorab NJ, Golmakani N. A review of the validity and reliability of assessment instruments for the final examination for the midwifery students of nursing and midwifery faculty of Mashhad. *AJS.* 2011; 7:504–510.
5. Hickling FW, Morgan KA. A comparison of the objective structured clinical examination results across campuses of the University of the West Indies (2001 and 2002) *West Indian Med J.* 2005; 54:139–143. [PubMed]
6. Hodges B. OSCE! Variations on a theme by Harden. *Med Educ.* 2003;37:1134–1140. [PubMed]
7. Ross M, Carroll G. Using the OSCE to measure clinical skills performance in nursing. *JAN.* 1988;13:45–56. [PubMed]
8. Tudiver F, Rose D. Reliability and validity testing of an evidence-based medicine OSCE station. *Fam Med.* 2009;41:89–91. [PubMed]
9. Brown G, Manogue M. The validity and reliability of an OSCE in dentistry. *Eur J Dent Educ.* 1999;3:117–125. [PubMed]
10. Florence HAU. Midwifery Education in Hong Kong-Implementation of a New Assessment System Hong Kong. *J Gyn Obstet Midwifery.* 2002;3:103–106.
11. Martin IG, Jolly B. Predictive validity and estimated cut score of an objective structured clinical examination (OSCE) used as an assessment of clinical skills at the end of the first clinical year. *Med Educ.* 2002;36:418–425. [PubMed]
12. Varkey P, Natt N. Validity evidence for an OSCE to assess competency in systems-based practice and practice-based learning and improvement: a preliminary investigation. *Acad Med.* 2008;83:775–780. [PubMed]
13. Mitchell ML, Henderson A. The objective structured clinical examination (OSCE): optimizing its value in the undergraduate nursing curriculum. *Nurse Educ Today.* 2009;29:398–404. [PubMed]
14. Khattab AD, Rawlings B. Use of a modified OSCE to assess nurse practitioner students. *Br J Nurs.* 2008;17:754–759. [PubMed]
15. Ryan S, Stevenson K. Assessment of clinical nurse specialists in rheumatology using an OSCE. *Musculoskeletal Care.* 2007;5:119–129. [PubMed]
16. Brosnan M, Evans W. Implementing objective structured clinical skills evaluation (OSCE) in nurse registration programmes in a centre in Ireland: a utilisation focused evaluation. *Nurse Educ Today.* 2006;26:115–122. [PubMed]
17. Allen R, Heard J. Surveying Students' Attitudes During the OSCE. *Adv Health Sci Educ Theory Pract.* 1998;3:197–206. [PubMed]
18. El-Nemer A, Kandeel N. Using OSCE as an assessment tool for clinical skills: nursing students' feedback. *AJBAS.* 2009;3:2465–2472.
19. Pierre RB, Wierenga A. Student evaluation of an OSCE in paediatrics at the University of the West Indies, Jamaica. *BMC Med Educ.* 2004;16:4–22. [PMC free article] [PubMed]
20. Byrne E, Smyth S. Lecturers' experiences and perspectives of using an objective structured clinical examination. *Nurse Educ Pract.* 2008;8:283–289. [PubMed]
21. Imani M, Tabatabaie H. Is OSCE successful in pediatrics? *J Med Edu.* 2005;6:153–158.
22. Eldarir SA, Sebaae HAE. Introduction of OSCE versus Traditional Method in Nursing Education: Faculty Capacity Building & Students' Perspectives. *A J S.* 2010;6:1002–1014.
23. Sturpe DA. Objective structured clinical examinations in doctor of pharmacy programs in the United States. *Am J Pharm Educ.* 2010;74:148. [PMC free article] [PubMed].