EFFECTIVENESS OF WORKSHOP ON OSCE AMONG NURSING TEACHING FACULTY

1St Author (Corresponding Author)

Dr. Mandira Gope

Associate Professor

Medical Surgical Nursing

Karnataka College of Nursing, Bangalore.

2nd Author

Dr. Ramu K.

2nd Author details

Dr. Ramu K

Dean and HOD

RR College of Nursing

Bangalore

ABSTRACT

The aim of the research was to explore the effectiveness of workshop on OSCE among nursing teaching faculty from different region of Bangalore, Karnataka. The research was conducted on 22nd May 2024. A Quantitative research design was adopted in this study. As a part of quantitative research design, a single-group pre-test-post-test experimental design was used in this study. In order to identify the effects of work shop on OSCE. Before providing theory and practical knowledge about OSCE method staff knowledge were assessed with structured knowledge questionaries. The study group of the research was comprised of 120 nursing faculties. The workshop was sponsored by Medladr and Star health care academy, Bangalore.

Result

Study result found there is an improvement in knowledge after the workshop, pretest knowledge adequate knowledge was only 20(16.6%), moderate knowledge was 79(65.8%) and inadequate knowledge was21(17.5%). Post-test knowledge score reveals inadequate knowledge only 1(0.8%), Moderate knowledge found 49(40.8%) and adequate knowledge has increased to 70(58.3%).

Conclusion

After the analysis of the pre-test and post-test results, we can conclude that there is an improvement in knowledge during post-test compare to pre-test and the workshop was effective for the nursing faculties.

Keywords: OSCE, Effectiveness, Structure Knowledge Questionaries etc.

INTRODUCTION

An evaluation method based on the leading of objectivity and evenness, in which the students proceed through a sequence of time-frame stations in a circle of the intend of assessment of procedure performance in a simulated environment. At every station, students are examined and assess against particular scoring rubrics by trained experts. According new updated INC recommendation OSCE method is compulsory evaluation methods for practical examination along with traditional methods.

OSCE is known as Objective Structured Clinical Examination, it a one of the common methods to assess clinical competence. For health care students, nursing students and medical students OSCE are the common assessment method. This type of assessment can be conduct in clinical

area as simulated environment and as well as in actual environment. In actual clinical environment we can conduct work place-based assessment method basically. OSCE assessment process has design with the concept of standardized assessment method and with clear objectives. In a particular time period students are completing serious activities in real clinical environment or simulated environment. Each series of activities is known as station. The station involved real patient or simulated patient and in real clinical area or in skill laboratory.

STATION

An OSCE station represents clinical situations that reflect what happens within healthcare work settings. It usually comprises a circuit of short (5-10 minutes) stations, in which each candidate is examined on a one-to-one basis with one or two impartial examiner(s) and patients who are either real or simulated. OSCE station set-up includes examiner, examinees, examination site, equipment, and examination station.



Station categories- There are different categories of stations which we can construct for the examination assessment that is Clinical Examination (*Performing clinical examination, Examining real patient, Examining simulated patient*), Communication skill (*History taking, Conflict resolution, Difficult referral/Conversation, Information giving, Breaking bad news*), Data interpretation (*Interpreting investigation result, Interpreting part of the instrument, Identification of types of traction*), Simulation / ABCDE assessment (*Assessing and managing an acutely unwell patient*) and Clinical Procedure (*Performing a clinical skill*).

STATION CATEGORIES



Construction of station- An OSCE examination consists of several different scenarios, all of which exist in a different station. The OSCE progresses as candidates move from station to station, engaging in different scenarios with mock patients (actors). They are assessed by examiners at each station and receive a score based on performance.

The time frame for OSCE- While time framing few points should be consider that is Content Skill to be assessed, Marks allotment of the station, Manned station or unmanned station, Examiner observes or students answer on the answer sheet.

Number of station- Number of stations is depend on the examination time frame and examination marks distribution decided by the examination board or university.

Duration of station- Duration is depends on the criteria and what topic needs to be evaluate during examination as well as types and number of stations.

Types of station- There is several types of OSCE station based on different categories which includes couplet station/Connecting station/Linked station, Examiner observed station, Students answer on the answer sheet, Procedure station, Question station, Manned station and Unmanned station.



TYPES OF STATION

OBJECTIVE

- 1. To assess the knowledge of the nursing teaching faculty about OSCE methods.
- 2. To evaluate the effectiveness of a workshop on OSCE among nursing teaching faculty.
- 3. To compare the pre-test and post test knowledge score of the nursing faculty about OSCE method.

MATERIALS AND METHODS

This study was conducted on 120 nursing faculties which includes different educational qualifications and experience in teaching. Purposive sampling technique was used in this study. Criteria for selecting sample was Participants were present during data collection, will to

participate in study and who has not attended any training for OSCE methods. Structured knowledge questionaries were used to assess the knowledge of the teachers about OSCE methods.

METHODOLOGY

The present research was produced with the permission of the Karnataka Nursing Council, Bangalore, Karnataka. The research was conducted in the year of 2024, 22nd May. The research includes enriched workshop training on Objective Structured Clinical Examination (OSCE) for nursing teaching faculty.

Research design

In this research Quantitative research method was adopted. One group pre-test and post-test experimental design was use in this study to assess the effectiveness of Objective Structured Clinical Examination (OSCE) among Nursing teaching faculty. The design is presented below in Table No-1.

Experimental Group	Pre-test	Training process	Post-test	
Nursing faculty from	Structure	Workshop on OSCE	Structure	
various district of	knowledge	(Objective Structured	knowledge	
Karnataka.	questionnaires to	Clinical Examination).	questionnaires	
	assess the		same as pre-test	
	knowledge level		to assess the	
	of nursing faculty.		knowledge level	
			of nursing faculty	

Table 1: Research design conducted in present study.

Above presented Table 1 reveals only a single group of faculties was selected in the one-group pre-test-posttest experimental design. This sample group is called as experimental group. The measurement of OSCE knowledge of the experimental group before beginning the experimental process (dependent variable) was conducted by collecting a pre-test knowledge score. After the pre-test, enriched workshop training was implemented, and thereafter, a re-measurement was performed by applying a post-test. After collecting post workshop data pre-test and post-test measurement results of the experimental group were compared.

Score Range

- 7-10 scores consider as adequate
- 4-7 scores consider as moderate
- Less than 4 scores consider as inadequate knowledge

RESULT

Table 2: Demographic variables for the study sample.

SL NO.	VARIABLES	FREQUENCY	PERCENTAGE
1.	Age		
	• 20-30 years	18	15%
	• 31-40 years	66	55%
	• 41-50 years	36	30%
2.	Sex		
	• Male	39	32.50%
	• Female	81	67.50%
3.	Religion		
	• Hindu	99	82.50%
	Muslim	9	7.50%
	• Christian	12	10%
	• Buddhist	0	0%
4.	Education		
	• B. Sc. Nursing	62	51.60%
	• M Sc. Nursing	47	39.10%
	PhD Nursing	11	9.10%
5.	Experience		
	• 1-10 years	49	40.80%
	• 11-20 years	30	25%
	• 21-30 years	20	16.60%
	• 31-40 years	21	17.50%
6.	Designation		

	• Tutor	23	19.10%
	• Lecturer	30	25%
	Assist. Professor	26	21.60%
	Associate Professor	22	18.30%
	• Professor	19	15.80%
7.	Specialty		
	Medical Surgical Nursing	33	27.50%
	Child Health Nursing	28	23.30%
	Mental Health Nursing	29	24.10%
	Community Health Nursing	7	5.80%
	• None	23	19.10%
8.	Previous experience of OSCE		
	workshop		
	• Yes	11	9.1%
	• No	109	90.8%

Table 2 reveals in this present study majority of the participants 66(55%) were from 31-40years of age group, 36(30%) from 41-50 years of age group and only 18(15%) were from 20-30 years of age group. Among all participants female participants 81(67.50%) were more than male participants 39(32.50%). Majority of the candidate from Hindu religion 99(82.5%), 12(10%) participants from Christian religion and 9(7.5%) participants from Muslim religion. 62(51.6%) were UG staff, 47(39.1%) were PG staff and 11(9.1%) were PhD holder among all candidates. Experience wise 49(40.8%) Participants were 1-10 years of experience, 30(25%) were having 11-20 years of experience, 20 (16.6%) were 21-30 years of experience and 21(17.5%) were having 31-40 years of experience. Table content shows Tutor were 23(19.1%), Lecturer was 30(25%), Assist. Professor were 26(21.6%), Associated Professor were 22(18.3%) and Professor were 19(15.8%). Department wise faculty were 33(27.5%) from Medical Surgical Nursing, 28(23.3%) from Child Health Nursing, 29(24.1%) from Mental Health Nursing, only 7(5.8%) from Community health nursing and 23(19.1%) were from undergraduate faculty. Majority of the candidate 109(90.8%) is not having previous experience of OSCE training or workshop.

	Range	Median	Mean	SD
Pre-test	2-9	5	5.033	1.549
Post-test	3-9	7	6.725	1.173

Table 3: Overall, Knowledge score Pre-test score and post-test score.

Table 3 shows that pre-test score is range from 2-9 marks knowledge score median was 5, mean and SD was 5.033 ± 1.549 . In other column post-test knowledge score range was 3-9 and median was 7, for the post-test knowledge score mean and SD was 6.725 ± 1.173 .

Table 4: Pre-test and post-test knowledge score.

Classification of respondents	Adequate	Moderate	Inadequate
Pre-test	20(16.6%)	79(65.8%)	21(17.5%)
Post-test	70(58.3%)	49(40.8%)	1(0.8%)

Table 4 reveals that in pretest knowledge adequate knowledge was only 20(16.6%), moderate knowledge was 79(65.8%) and inadequate knowledge was21(17.5%). Post-test knowledge score reveals inadequate knowledge only 1(0.8%), Moderate knowledge found 49(40.8%) and adequate knowledge has increased to 70(58.3%).



Figure 1: Pre-test and post-test knowledge score.

Table 5: Analysis of Pre-test and post-test knowledge scores to assess the effectiveness of the study.

Component	Pre-test		Post-test		Paired	P-value
	Mean	SD	Mean	SD	T- value	Inference
Knowledge of	5.033	1.549	6.725	1.173	1.150	*0.05
OSCE						

Significant = *, non-significant = NS.

Table 5 reveals pre-test and post test knowledge score of OSCE, pre-test mean and SD was 5.033 ± 1.549 , post-test mean and SD was 6.725 ± 1.173 . Paired t-value for the knowledge score of the OSCE was 1.150 in 0.05 level and it is less than 0.05% and it's showing result is significant.

CONCLUSION

Study outcome reveals that there is an improvement in knowledge scores about OSCE methods after attending the workshop among nursing faculties. As this process has newly added in our exam assessment process adequate knowledge is essential for all faculties as well as students for better outcome and successful evaluation.

ACKNOWLEDGEMENT

This study is a part of faculty development programme. I am thankful to the authority to give this opportunity to conduct this programme.

REFERENCE

- P. Gupta, P. Dewan, T. Singh. Objective structured clinical examination (OSCE) Revisited Indian Pediatric, 47 (11) (2010), pp. 911-920.
- U. Onwudiegwu. OSCE: design, development and deployment. J West Afr Coll Surg, 8 (1) (2018), pp. 1-22.
- 3. K. Reid, D. Smallwood, M. Collins, R. Sutherland, A. Dodds Taking OSCE examiner training on the road: reaching the masses Med Educ Online, 21 (2016), Article 32389.
- W.Y.A. Wong, J. Thistlethwaite, K. Moni, C. Roberts Using cultural historical activity theory to reflect on the sociocultural complexities in OSCE examiners' judgements Adv Health Sci Educ Theory Pract, 28 (1) (2023), pp. 27-46.

- P. Zimmermann, M. Kadmon Standardized examinees: development of a new tool to evaluate factors influencing OSCE scores and to train examiners GMS J Med Educ, 37 (4) (2020).
- N. Junod Perron, M. Louis-Simonet, B. Cerutti, E. Pfarrwaller, J. Sommer, M. Nendaz. The quality of feedback during formative OSCEs depends on the tutors' profile. BMC Med Educ, 16 (1) (2016), p. 293.
- A.W. Bernard, G. Ceccolini, R. Feinn, et al. Medical students review of formative OSCE scores, checklists, and videos improves with student-faculty debriefing meetings. Med Educ Online, 22 (1) (2017).
- C.F. Ngim, P.D. Fullerton, V. Ratnasingam, et al. Feedback after OSCE: a comparison of face to face versus enhanced written feedback. BMC Med Educ, 21 (1) (2021), p. 180.