



Original Article

Perception of Faculty Teachers Towards Objective Structured Clinical Evaluation in Public Nursing Colleges of Peshawar

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ABSTRACT

There are different methods of evaluating clinical competencies in medical field students, among which the objective structured clinical examination is considered the most reliable and effective way of assessing clinical skills. Most popular method for assessment of clinical skills in Nursing Education. **Objective:** The study aims to explore and compare the perceptions of nursing faculty members regarding objective structured clinical examination application in the evaluation and assessment of the clinical skills of the nursing students. **Methods:** A descriptive cross-sectional design was used to collect data from 46 Faculty teachers through simple random sampling. Content validity of the adopted questionnaire was verified by (5) experts in the field of nursing education and the internal consistency of the scale was found to be excellent (Cronbach's Alpha =0.949). **Results:** The mean age of study participants was 38.23±9.69. The majority of Participants 82.6 % (n=38) were females Half of the participants were Post RN BSN in qualification (n=23). Perceptions were categorized into positive and negative by the median cut-off value. 93.5 % faculty teacher's express positive attitude regarding training and conducting of Objective Structured Clinical Examination. **Conclusions:** The study concluded that, the faculty teacher's knowledge skills and attitude were positive regarding the Objective Structured Clinical Examination (OSCE) exam. The study revealed that OSCE is an appreciated practical learning experience and maximum of the faculty teachers agreed that OSCE facilitated the assessment and develop their psychomotor skills. P=0.05 so there is no association found between age group, gender, level of education and perception.

INTRODUCTION

One of the basic and important components of the education system is its evaluation. There are different methods of evaluating clinical competencies in medical field students, among which the objective structured clinical examination is considered the most reliable and effective way of assessing clinical skills [1]. It is defined as, "the method of choice for evaluation of learner's clinical competence and underpinning knowledge, mostly in simulated condition." [2]. OSCEs provide a simulated work

environment where the students are given short assessment tasks, and are assessed objectively using pre-determined criteria or checklist. Currently, objective structured clinical examination is a broadly used and most popular method for evaluation of clinical skills in Nursing Education [3]. Currently it is also emerged in other fields like dentistry and pharmacy to investigate clinical skills performance [4]. The objective structured, clinical evaluation (OSCE) was used in medicine in 1975 and has

been developed by Roland Harden in Scotland [5]. In 1984, the school of nursing at McMaster University developed OSCE to assess clinical competencies among primary health care nursing in third-year students, but in 1985 became a more adopted method of all nursing skills in Canada (Ross et al., 2014). Harden developed OSCE in the 90's to be more formative and summative and along with this, he was trying to make OSCE more objective [6]. OSCE is used to evaluate practice using objectivity in nature, in practice, nursing faculty can assess knowledge and skills at a time [7]. Nursing is considered to be a highly significant and effective psychomotor domain, which allows students to apply principles that learned in the classroom safely and competently [2]. Nursing will still depend on practice, which occupied the cornerstone in the healthcare system [8]. Nursing includes the knowledge domain, affective domain to ensure safety among patient and psychomotor domain to make nurses' more skillful [9]. Nursing faculty has a higher chance to influence students' learning and can make a positive or negative shape on nursing practice [10,5]. Using OSCE is considered an imperative reason for client safety; minimizing risk, students' motivation, and progression of clinical competences [11]. Assessment and evaluation of clinical skills have a vital role in nursing education and the selection of appropriate methods has been a matter of permanent concern for faculty members and course coordinators. OSCE is used worldwide in nursing education and it's considered as a valid and reliable tool, but its practice is very limited in developing countries including Pakistan, still not in use in nursing colleges of KPK. Although a good chunk of knowledge is available regarding the format and organizational aspects of OSCE and its administration but very rare studies published on the perception and attitudes of nursing faculty about OSCE. The study aims to explore and compare the perceptions and attitude of nursing faculty members regarding objective structured clinical examination application in evaluation and assessment of the clinical skills of the nursing students and provide recommendations on OSCE is best evaluation method in the clinical exam and should be involved in all practical nursing subjects.

METHODS

In this study Descriptive cross-sectional design was used to learn the perception of Faculty teachers toward OSCE in public Nursing colleges of Peshawar KPK. Data were collected from January 3, 2022 to January 15, 2022. The study sample included teachers with at least one-year of experience and had the experience to conduct any OSCE, skill sign-up and examination. The study sample size was 46 and was selected through simple random sampling. Data was collected through an adopted questionnaire and

consist of two sections [12]. The first section on demographic characteristics: Age gender, level of education and years of experiences. The second section consists of 28 questions regarding the perception of faculty toward OSCE. The Questionnaire includes 5- point Likert scale (1= Strongly disagree, 2= Disagree, 3= Uncertain, 4= Agree, 5= Strongly agree) Content validity of the adopted questionnaire was verified by (5) nursing experts in the field of education to decide the application and extensiveness. Reliability analyses were run for the perception of the OSCE tool and it was found that the internal consistency of the tool was measured to be excellent (Cronbach's Alpha=0.949).

Reliability Statistics		
Cronbach's Alpha	N	No of Items
.949		28

RESULTS

The demographic information of the participants as given in Table .1 showed that the participants included in this study were from five Public nursing colleges of Peshawar. The mean age of study participants was 38.23±9.69. Majority of Participants 82.6 % (n=38) were females and 17.4% (n=8) were males. Half of the participants were Post RN BSN in qualification (n=23), followed by Master in Nursing which was 37 % (n=17), Generic Bachelor of Science in Nursing 10.9 % (n=5), and Ph.D 2.2% (n=1). The mean years of experience of study participants were 13.04±8.69.

Demographic details	n=46	Percentage
Gender		
Female	38	82.6%
Male	08	17.4%
Education Level		
Generic BSN	05	10.9%
Post RN BSN	23	50%
Master in Nursing	17	37%
PHD in nursing	01	2.2%
Age		
Mean ±SD	38.23±9.69	
Years of experience		
Mean ±SD	13.04±8.69	

Table 1: Demographic Information

Faculty perceptions were divided into two categories negative and positive with a median cut-off value less than the median indicating negative perception, and above the median indicating positive perception as (Jaiswal P, Mehta RK, 2019). More than nine-tenths 93.5% (n=43) of Faculty teachers reported a positive perception regarding OSCE, while merely, 6.5% (n=3) responded with a negative perception toward OSCE as shown in Table 2.

Perception	Frequency (%)	Valid %
Negative perception	3(6.5%)	6.5%
Positive Perception	43(93.5%)	93.5%
Total	46(100.0%)	100.0%

Table 2: Categorical distribution of Perception

More than four score (84.7%) of faculty teachers responded with strongly agree and agree regarding the involvement of OSCE is helpful in the nursing syllabus. It helps students to acquire more information. It also enables students to get enough confidence to link their learning skills in the clinical setting. The majority of the faculty teacher (93.5%) of the faculty teachers were agreed that OSCE offers a new educational experience for both lecturer and students as shown in Table 3. Almost nine tenth (89.1%) of faculty teachers reported that OSCE helps students to develop their psychomotor skills and realized it a better technique to assess students' psychomotor skills. They also agreed that OSCE also facilitate faculty members to measure their psychomotor skills. The majority (74%) of the participants reported that OSCE addressed a true assessment technique for psychomotor abilities while the same number of the participants was reported that OSCE is one of the most interesting physical examinations. More than a third of Quartile (78.3%) faculty teachers agreed and strongly agreed that OSCE is clear and free from biases. (76.1%) of the study participants agreed that OSCE is a fair method for all students. Third quarter (76%) of the study participants strongly agreed that OSCE is less stressful while more than one-half (54.6%) of the participants were not agreed with it. The majority of the Faculty teacher (82.6%) were agreed and strongly agreed that one of the advantages of OSCE is it enables Faculty teachers to evaluate their level of knowledge More than nine tenths (91.3%) of the study participants were strongly agreed that OSCE enables Faculty teachers to gain more skills and different specialty. Four Fifth (80.5%) of the participants were strongly agreed. that questions asked in OSCE were related to the course. Almost nine tenths (89.1%) of the faculty teachers strongly agreed and agreed that they could be able to prepare for the process of OSCE. More than fifty percent of the participants strongly agreed that OSCE is the right option for all levels of students. The majority of the faculty teacher (93.5%) of the faculty teacher were agreed that OSCE offers new educational experiences for both lecturer and students. While More than two third (67.4%) of the participants agreed that OSCE is beneficial in assessing future performance as shown as Table 3. Chi-Square test has been run for the association of Categorical variables. Categorical distribution of perception is distributed into positive and negative perception. Gender and level of education have been tested with these categorical distributions of perception. Chi-square tests

were run for the association of demographic variables and Categorical distribution of perception. It was found that there is no relation between these categorical variables as a P value greater than 0.05.

Items	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree	Mean	SD
	%	%	%	%	%		
The OSCE is a useful to be a part in nursing syllabus	54.3	32.6	4.3		8.7	4.24	1.158
It is the exact technique of assessment knowledge	21.7	54.3	10.9	6.5	6.5	3.78	1.073
OSCE assist students to get more knowledge	30.4	54.3	4.3	2.2	8.7	3.96	1.15
It is the only way for assessment of students psychomotor skills	39.1	50	4.3	2.2	4.3	4.17	.950
OSCE helps students develop their psychomotor skills	45.7	43.5	8.7		2.2	4.30	.813
OSCE supports students to get confidence while performing learn skills in the clinical settings	41.3	43.5	8.7	2.2	4.3	4.15	.988
It aids the students to be prepare for challenges of working as staff nurse	37	47.8	8.7	2.2	4.3	4.11	.971
OSCE enable faculty staff to evaluate their level of knowledge	23.9	58.7	8.7	4.3	4.3	3.93	.952
OSCE allows faculty members to assess their own psychomotor skills	34.8	54.3	6.5		4.3	4.15	.894
OSCE support faculty members to acquire more skills and different specialty	34.8	56.5	4.3		4.3	4.17	.877
OSCE is clear and biases free	37	41.3	17.4	2.2	2.2	4.09	.915
OSCE is fair to all students	28.3	47.8	15.2	4.3	4.3	3.91	1.007
OSCE evaluate all the students objectively	28.3	56.5	8.7	2.2	4.3	1.007	.931
The OSCE question are relevant to the course	28.3	52.2	13	4.3	2.2	4.00	.894
OSCE should be summative evaluation	13	56.5	10.9	15.2	4.3	3.59	1.045
It should be summative and formative	30.4	56.5	2.2	6.5	4.3	4.02	1.000
Take more time in organizing scenario compared to customary method	28.3	41.3	15.2	10.9	4.3	3.78	1.114

Items	Strongly Agree	Agree	Uncertain	Disagree	Strongly disagree	Mean	SD
	%	%	%	%	%		
I can able to fix and practice the OSCE	41.3	47.8	2.2	2.2	6.5	4.15	1.053
OSCE is interesting	39.1	47.8	6.5	2.2	4.3	4.15	.965
OSCE Covered wide area of knowledge?	32.6	39.1	10.9	13	4.3	3.83	1.161
OSCE can be Easily passed?	10.9	39.1	15.2	23.9	10.9	3.15	1.229
OSCE is less stressful	6.5	30.4	8.7	47.8	6.5	2.83	1.141
OSCE is Exhausting and lengthy	4.3	34.8	26.1	32.6	2.2	3.07	.975
Suitable for all level of students	17.4	41.3	21.7	15.2	4.3	3.52	1.090
OSCE is Helpful to assess future performance	21.7	45.7	13	17.4	2.2	3.67	1.076
OSCE Enhances teaching level?	32.6	50	6.5	8.7	2.2	4.02	.977
OSCE Improve evaluation method?	23.9	63	4.4	6.5	2.2	4.00	.869
OSCE deals new educational practice for both lecturer and students	41.3	52.2	2.2	2.2	2.2	4.28	.807

Table 3: Perception of Faculty teachers toward OSCE

DISCUSSION

The finding of this study found that perceptions of Faculty teachers were positive regarding OSCE as an evaluation tool. It is fair, and free of biasness supported by the study of showed a positive perception by teachers towards OSCE/ OSPE [15]. They accepted it as a fair, unbiased, valid, reliable assessment method as compared to traditional practical examination. Matching with the result of the faculty teacher's showed positive attitude regarding readiness and handling of OSCE exam and the overall results were positive in the questionnaire and the entire perception of Faculty members toward OSCE exam was very positive [12,14]. Nursing schools' faculty evaluate OSCE a valuable and appropriate examination technique for practical skills [19]. In our study more than one-half (54.6%) of the participants reported that OSCE is stressful. Matching with report of [16]. More than three-quarters of the participants reported that the OSCE made higher levels of stress compared to other examination methods. 69.3% of the participants strongly agreed that the preparation of the Scenario for OSCE took more time as compared to the traditional method. These apprehensions in the link were emphasized by [17], who stated that more than 50 percent of study participants observed that exam was a major concern. While on other hand 69.5% of the faculty teachers were strongly agreed and agreed that OSCE evaluation should be summative. The matching result with [9], 80% of faculty members said it should remain to be summative.

More than third of Quartile (78.3%) faculty teachers were strongly agreed that OSCE is clear and bias-free. (76.1%) of the study participants were strongly agreed that OSCE is fair to all students. Matching with 90% of faculty [9] members said OSCE was transparent, bias free and fair to all students [18]. 70.6% emphasized that the OSCE is unbiased assessment method. Another study reported by [13]. 80% of the participants were reported that OSCE is a fair process of assessing students' skills as well as a better assessment technique than the traditional short case exams. Almost nine tenth (89.1%) of faculty teachers reported that OSCE helps students to develop their psychomotor skills and realized it a better technique to assess students' psychomotor skills. They also agreed that OSCE also facilitate faculty member to measure their own psychomotor skills. The same result is shown by the study reported by [12]. that the majority (74%) of the participants were reported that OSCE addressed a true assessment technique for psychomotor abilities while the same number of the participants was reported that OSCE is one of the most interesting physical examinations. In addition, several studies reported the importance of OSCEs for the nursing students in terms of evaluating them in their practical skills [20-21].

CONCLUSION

The study concluded that, the faculty teacher's knowledge skills and attitude was positive regarding Objective Structured Clinical Examination (OSCE) exam. The faculty teacher's express positive attitude regarding training and conducting of Objective Structured Clinical Examination. Teachers were gratified with Objective Structured Clinical Examination (OSCE) as an assessment and evaluation tool and cherished the learning practices. The study showed that OSCE is valued as a hands-on learning opportunity, and the majority of faculty teachers agreed that OSCE helped them gauge and improve their psychomotor abilities. Furthermore, it was found by the study that faculty teachers concurred that OSCE is impartial and fair to all learner.

Conflicts of Interest

The authors declare no conflict of interest.

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