DOI: https://doi.org/10.54393/nrs.v4i01.75

NURSEARCHER
https://www.nursearcher.com/index.php/nrs
ISSN (P): 2958-9746, (E): 2958-9738
Volume 4, Issue 1 (Jan-Mar 2024)

Original Article

Investigating the Level of Attitude and Satisfaction among Nursing Instructors Regarding OSCE/OSPE at the Institutes of KPK

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ARTICLE INFO

Keywords:
Clinical Competence, Nursing Education, Nursing Students, Clinical Examinations, Attitude Level

How to Cite:
Haq, F., Bashir, S., & Kumar, S. (2024). Investigating the Level of Attitude and Satisfaction among Nursing Instructors Regarding OSCE/OSPE at the Institutes of KPK : Attitude and Satisfaction Regarding OSCE/OSPE . NURSEARCHER (Journal of Nursing & Midwifery Sciences), 4(01). https://doi.org/10.54393/nrs.v4i01.75

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Received Date: 15th February, 2024
Acceptance Date: 27th March, 2024
Published Date: 31st March, 2024

ABSTRACT

The Objective Structured Clinical Examination (OSCE) is a commonly utilized tool for evaluating clinical performance among students pursuing medical and health professions. **Objective:** To determine the level of attitude and satisfaction among nursing educators in Khyber Pakhtunkhwa, Pakistan. **Methods:** A cross sectional analytical study design was used to evaluate the level of attitude and satisfaction from nursing educators of Khyber Pakhtunkhwa from 181 participants using convenient sampling technique. The study was conducted from March to December 2023. A valid and reliable adopted questionnaire was used for collection. The study was approved by the ethical review board while informed consent from each participant was taken before data collection. Independent t-test, ANNOVA and chi-square test was applied through SPSS version 22.0 for data analysis. **Results:** In the present study, the number of males was higher (65%), age 25 to 35 was 89 (49.4%), and education post-RN BSN was 101 (56.1%) in majority. The maximum number of the participants, 132 (73.3%), attitude level was moderate, having a mean score of 46.79 ± 7.01, while the level of satisfaction of the higher number of participants, 141 (78.3%), was also moderate, with a mean score of 79.77 ± 10.53. There was significant difference in mean score of attitudes within the groups of qualification, and experience, while the satisfaction there were significant difference within the groups of age, qualification and experience. **Conclusions:** The study concluded that attitude is associated with age, qualification, and experience, while satisfaction was associated with qualification, the tool should be improved for acceptance and understanding.

INTRODUCTION

Nursing is an art as well as a science; science requires observation and clinical experiences, which are applied in the form of assessment within nursing institute limits, procedures, methods supported by data, and evidence-based practice. Nursing is an art that requires knowledge and experience in delivering care, interacting with patients, understanding them, and showing love and compassion to those who are ill [1,2]. Over time, the medical community's educational system has changed its approach to assessment. There are many different ways to evaluate students these days. The process of evaluating students aims to enhance and elevate the quality of education programs [3]. It is evident that written tests are not appropriate for evaluating clinical competency in undergraduate nursing students, as universities are required to ensure the knowledge and clinical performance of students before permitting them to act as registered nurses. Therefore, evaluating the clinical skills of undergraduate nursing students is crucial prior to their entry into the clinical environment. Since its first introduction by Harden in 1975, the OSCE has been extensively utilized to evaluate clinical abilities within a simulated clinical environment [4]. A contemporary exam format frequently utilized in the health sciences is the OSCE. OSCE is more an assessment tool than test, its structure contains multiple stations in which all the students go through and tested for various fixed content and skills, on the basis skills and knowledge one by one all

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the students are evaluated through same contents [5]. Healthcare professionals use the OSCE as a standard method to assess students' clinical competency [5]. Clinical education is the foundation of a nurse's professional practice in nursing programs. Thus, evaluating the practical competency of nursing students is essential to their education [6]. Since its creation in the 1970s, the OSCE has been widely used as a tool to assess nursing students' clinical performance [7]. It is given in a strictly regulated setting and makes use of standardized scenarios that reflect actual clinical settings [8]. In contrast to conventional clinical examinations, which have been criticized for their lack of objectivity and consistency, the OSCE is one of the fewest trustworthy instruments for evaluation; it improves student learning by enabling students to show the entirety of their knowledge and abilities while also offering a more objective means of evaluation [9, 10]. The OSCE is a performance-based exam. During the evaluation process, trainees pass through a number of stations where they evaluate, assess, and provide care to uniform patients who are asked questions. An OSCE is characterized by examiners using a checklist to evaluate trainees; it is organized because each participant observes and perform the same procedure in the given time frame; it is clinical in nature because the tasks are same of real-world skilled based situations; and it is an examination [11]. The OSCE is most frequently employed for clinical assessment in undergraduate nursing education because it is a reliable instrument for demonstration-based assessment in safe and realistic situations [12]. Most nursing schools use the OSCE, a performance-based assessment tool, as an educational tool to give students prompt response and improve their practice and skills, as well as a barrier (exit) examination for testing the minimum acceptable performance standards of students during the undergraduate clinical years [13].

In Khyber Pakhtunkhwa, the only medical university, which is Khyber Medical University, proposed OSCE/OSPE as an important part of each skill-based subject that is conducted after regular examinations. Therefore, the study was conducted with the aim of determining the level of attitude and satisfaction among nursing educators in Khyber Pakhtunkhwa, Pakistan.

METHODS

The study was conducted in nursing institutes in Khyber Pakhtunkhwa, Pakistan, using a cross-sectional analytical study design from March to December 2023. The study population was the nursing instructors that educate students in the private and public sectors at the Khyber Pakhtunkhwa institute, which was recognized by the Pakistan Nursing Council and affiliated with Khyber Medical University. The nursing educators are the participants who have completed their undergraduate program and have a valid Pakistan Nursing Council license. The inclusion criteria for the study were that the participant must have a valid PNC license, have more than one year of experience, and teach current nursing subjects in any recognized institute, while nursing instructors who are on leave or are not willing to be voluntary participants are excluded from the study. The sample size was calculated assuming all the nursing faculty as the population, then using 95% confidence, 5% margin of error and 80% prevalence the sample size was 185, and the data of 4 participants were excluded because they had incomplete forms; therefore, the final sample size of the study was 181 using the convenient sampling technique. The data collection process consists of two steps. In the first step, the demographic data of the participants were collected, which was gender, age, education and experience, while a valid and reliable questionnaire was used for the second step of the study, which was attitude and satisfaction of the participant. The attitude level was evaluated through an 18-item questionnaire with a 5-point Likert scale response from strongly disagree (1) to strongly agree (5). The data were divided into mild (18–42), moderate (43 to 66) and high (67–90) levels of attitude through cutoff values. Reliability was 0.8 and the validity of the tool was 0.87 [14]. The level of satisfaction was assessed through a 30-item questionnaire with a 5-point Likert scale response from strongly disagree (1) to strongly agree (5). The values were nominated as mild with a score of 30–70, moderate with a score of 71–110, and high (71–110). The reliability was 0.86, the validity of the tool was 0.8 and the consistency of the tool for all the items was from 0.7 to 0.9 [15, 16]. Data analysis was performed through SPSS 22.0 as descriptive and inferential statistics. An independent t-test and an ANNOVA were used to identify differences within the groups, while a chi-square test was used to identify the association of attitude and satisfaction with demographic variables. The Ziauddin University Karachi ethical review committee accepted the project, and prior to data collection, each setting gave its consent. The study's goals and objectives were explained to the participants, and they received assurances prior to giving their informed permission that the information would be kept private and that they would have the freedom to withdraw from the study at any moment to protect their rights.

RESULTS

In the present study, the number of males was higher (65%), age 25 to 35 was 89 (49.4%), education post-RN BSN was 101 (56.1%), and experience of 2 to 6 years was 107 (59.4%) in the majority (table 1).

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Table 1: Demographic Data of the Participants (N=180)

Variables	Frequency (%)
Gender	
Male	117 (65)
Female	63 (35)
Age	
25-35	89 (49.4)
36-45	69 (38.3)
46-55	11 (6.1)
56 and above	11 (6.1)
Qualification	
G-BSN (4 years)	44 (24.4)
Post RN BSN	101 (56.1)
MSN	35 (19.4)
Experience	
2-6	107 (59.4)
7-11	38 (21.1)
12-16	24 (13.3)
17 and Above	11 (6.1)

Table 2 reveals that the majority of the participants, 132 (73.3%), attitude level was moderate, having a mean score of 46.79 ± 7.01, while the level of satisfaction of the higher number of participants, 141 (78.3%), was also moderate, with a mean score of 79.77 ± 10.53.

Table 2: Level of Attitude and Satisfaction of The Participants

Factors	Mild	Moderate	High	Mean ± SD
Attitude	48 (26.7%)	132 (73.3%)	0	46.79 ± 7.01
Satisfaction	39 (21.7%)	141 (78.3%)	0	79.77 ± 10.53

Table 3 shows that there was significant difference in mean score of attitudes within the groups of qualification (0.000), and experience (0.006), while there was no significant difference in the mean score of attitudes within the groups of gender (0.314), and age (0.124).

Table 3: Association of Attitude with Demographic Characteristics

Variables	Mean ± SD	F	p-value
Gender			
Male	46.68 ± 6.69	1.019	0.314
Female	47.02 ± 7.61		
Age			
25-35	45.74 ± 7.24	1.944	0.124
36-45	47.43 ± 7.35		
46-55	50.45 ± 3.69		
56 and above	47.64 ± 2.80		
Qualification			
G-BSN (4 years)	42.86 ± 6.21	86.760	0.000
Post RN BSN	45.10 ± 5.02		
MSN	56.63 ± 2.77		
Experience			
2-6	47.44 ± 6.20	4.256	0.006
7-11	43.39 ± 6.08		
12-16	48.83 ± 10.4		
17 and Above	47.82 ± 5.17		

Table 4 report that there was significant difference in mean score of satisfaction within the groups of age (0.017) qualification (0.000) and experience (0.000), while no significant difference was found in gender group (0.622).

Table 4: Association of Knowledge with Demographic Characteristics

Variables	Mean ± SD	F	p-value
Gender			
Male	78.66 ± 10.1	0.244	0.622
Female	81.83 ± 11.0		
Age			
25-35	77.73 ± 10.2	3.481	0.017
36-45	80.71 ± 11.5		
46-55	50.45 ± 7.03		
56 and above	47.64 ± 1.66		
Qualification			
G-BSN (4 years)	76.82 ± 7.32	78.910	0.000
Post RN BSN	75.97 ± 8.95		
MSN	94.43 ± 2.20		
Experience			
2-6	79.31 ± 10.4	7.647	0.000
7-11	75.37 ± 7.06		
12-16	84.33 ± 13.2		
17 and Above	89.45 ± 2.84		

Table 5 shows that attitude is associated with age (p-0.003), qualification (p-0.000), and experience (p-0.003), while not associated with gender (p-0.326). The level of satisfaction is associated with qualification (p-0.001), while not associated with gender (p-0.209), age (p-0.069), and experience (p-0.072).

Table 5: Association of Attitude and Satisfaction with Selected Variables

Factors	Gender	Age	Qualification	Experience
Attitude	0.326	0.003	0.000	0.003
Satisfaction	0.209	0.069	0.001	0.072

DISCUSSION

In the present study, the majority of the participants, 132 (73.3%), attitude level was moderate, having a mean score of 46.79 ± 7.01. it may be due to their interaction with the recent recommendation of Khyber Medical University that OSPE/OSCE is an integral part of nursing examination; therefore, before training the students, the nursing educators enhance their capability in clinical examination. None of the participants attitudes were high due to the nonavailability of a proper course or training that would improve their clinical skills, which would enhance their attitude. A study reveals that in terms of attitude about the OSCE, 57 (35.6%) thought that it helps them to pay more attention in practical classes, whereas the other students 60 (37.5%) disagreed or had no opinion 42 (26.3%) about it. 53 (33.1%) students thought the compare to clinical test the

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OSCE was more stressful, but the majority of respondents 57 (35.6%) indicated positively that the OSCE is a more difficult type of examination. Additionally, 56 (35.0%) students stated that they could not pass the OSCE without consistently attending their lessons, and 54 (33.8%) students contended that there was little difference between the OSCE and other clinical assessments. Furthermore, the majority of students 65 (40.6%) did not believe that there should be another option for practical testing outside the OSCE [17]. In the current study, the majority of the participants attitudes were neutral 79 (43.9%) and disagreeing 79 (43.9%) towards the fact that OSCE is a fair method of assessment. A study conducted in Kuwait reveals that OSCE is transparent, impartial, and fair; 90% of faculty members agree. But just 63% and 77.8% of BSN graduates, respectively, felt that the OSCE is fair, transparent, and devoid of bias. Furthermore, only 46.2% and 49.5% of ADN graduates concurred with the assertions [18]. In this study, the majority of the respondents' attitudes were neutral 84 (46.7%) followed by disagree 70 (38.9%) towards the duration of OSCE, which is sufficient. It may be due to the limited time of 5 minutes at each station. Nursing educators and students consider that this time should be increased. Supporting our findings, a study report found that sixty percent of research participants said that there wasn't enough time to read the OSCE instructions. In a similar way, 64.4% of them thought the thirty minutes allotted to finish the procedure were insufficient and recommended extending it [17]. Another study also shows that over 50% of study participants said that they would need additional time to finish every OSCE station [19,20]. One possible cause of the anxiety among pupils could be the unrealistic time limitations assigned to each station [21]. Nursing educators typically estimate the time allotted to each station during the OSCE planning stage by taking into account a number of variables, including learning outcomes, student level, objectives, and the skill being assessed [17]. In this study, the majority of participants' attitudes were disagreed 92 (51.1%) that OSCE is an opportunity to show practical skills, while the maximum number of respondents attitudes were neutral 90 (50%), followed by disagree 70 (38.9%) that OSCE provides a chance to show their clinical knowledge. It is because nursing educators consider this a practical examination, therefore, students became stressed due to the environment and short duration, while later on, these students performed well in their clinical duties in the hospital. A study found that the OSCE was useful in preparation for clinical practice. Furthermore, when asked if the OSCE was required for clinical competency, every participant in the previously published study said "yes" [22]. The OSCE is acknowledged as an objective assessment tool, notwithstanding the possibility that it could cause students more stress [23]. In the current study, the level of satisfaction of a higher number of participants was 141 (78.3%), which was also moderate with a mean score of 79.77 ± 10.53. Up until now, the primary purpose of the OSCE has been to evaluate student proficiency in clinical simulation in a secure learning environment or at the "shows how" level according to Millar's pyramid [24]. Moreover, the maximum number of respondent satisfactions was neutral 92 (51.1%), followed by disagree 55 (30.65%) that the station should be well-structured, while a higher number of participant satisfactions were neutral regarding whether the station should be prepared for each activity. It may be due to the limited experience of nursing educators in conducting OSPE examinations. A study conducted in Egypt reveals that regarding station setup, organization, validity and reliability, OSCE setting, clear instructions, and efficacy, the students' opinions in this study indicated a more positive response to OSCE [15]. Another study shows favorable findings about students' opinions of the exam's structure that were reported in research evaluating the surgical OSCE in Pakistan [25]. In this study, the majority of respondents satisfaction was neutral 105, (58.3%) towards the fact that OSCE is a true scale to measure clinical skills, as well as neutral 111 (61.7%) regarding the OSPE test wide range of clinical skills, while the majority response was also neutral 93 (51.7%) that OSCE should remain the form of assessment in the future, followed by disagreeing 66 (36.7%). This neutral response by the majority of the nursing instructors pointed out that they are not in agreement with the current practice of OSPE in the province; it may be due to multiple stations in a limited time, and they doubt that all the educators clinical experience may not be so wide that they will guide and train the students. An Egyptian study shows that everyone is assessed on the same type of station, by the same examiners, and with the same level of case difficulty. According to the results, the students' answers demonstrated a high degree of trustworthiness with regard to station setup and the appropriate guidance given for the OSCE. [17]. Other studies have shown that students felt that the OSCE was more valid and reliable than other traditional clinical examination methods. This study also found that students were highly satisfied with the validity and reliability of the exam [26]. Furthermore, research on 95 students at King Saud University in Saudi Arabia showed that the OSCE is a very trustworthy technique for assessing pupils [27]. There are certain limitations of the study: such as study is conducted in one province that limit its generalizability, while the population was only the nursing educators that require more clinical instructors, and the design was cross sectional that does not provide cause and effect relationship therefore experimental study is required.

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CONCLUSIONS

The study concluded on the basis of findings that the majority of the participants attitude and satisfaction were moderate, while they were concerned and stressed regarding the structure of stations, arrangement of the institutes, stressful environment, time limitations to complete procedures and tasks and unfriendly examiners. The nursing educators also pointed out that there should be regular practice within each institute to train and practice their students to prepare them for that environment, which requires continuous education and workshops for the nursing instructors that they utilize within their institutes.

Authors Contribution

Conceptualization: FH
Methodology: FH
Formal analysis: SB
Writing-review and editing: FH, SK

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

Source of Funding

The authors received no financial support for the research, authorship and/or publication of this article.

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