

Nursing Students' Perceptions Regarding Modality Use of the Objective Structured Clinical Examination (OSCE)

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Abstract

Background: The Objective Structured Clinical Examination (OSCE) has become a widely accepted method for assessing clinical competence based on objective testing among maternity nursing students, which need for understanding this examination so they can enter the debate on this issue. The aim of this study was to evaluate nursing student's perceptions regarding the use of the Objective Structured Clinical Examination as a nontraditional method of clinical evaluation. **Subjects and Methods:** Research design: A cross-sectional descriptive design was conducted. **Subjects:** A random sample of (88) third year nursing students were recruited in the study. **Setting:** the study was conducted in Obstetrics and Gynecology nursing lab at Qena Faculty of Nursing - South Valley University. **Tools of data collection** were collected through one main tool: A structured interview questionnaire, distributed to the nursing students at the end of the examination of perception of students about the OSCE as a method of evaluation. **Results:** of the study indicated that the perceptions of the third year nursing students regarding the OSCE. It was found that 85.2% of them considered the OSCE as the best method of evaluation. Moreover, 79.5% suggested that they need to training about using the OSCE and preparation before the final exam. The correlation between "perception score" and "conversation skills score" = 0.943 which means the existence of a strong statistical positive relationship between both of them. **Conclusion:** In spite of the needed training about the OSCE, nursing students' perceived it as a fair and better method of evaluation as it covers a wide range of skills and improves their assessment of clinical competence. **Recommendation:** The researchers recommended that replication of the research on a large probability sample is recommended for generalizing the findings.

Keywords: Objective Structured Clinical Examination, Students Perception, Maternity Nurses

1. Introduction

The Objective Structured Clinical Examination (OSCE) is an examination which is purposely conducted for health science to assess clinical competence among medical, nurses and midwifery students. Recently, the scope of the OSCE examination has been expanded for undergoing a lot of modification to suit students from different disciplines. It makes the students involve in active participation rather than theory so that they can reserve the real-world situations, through keeps students engaged, empowers to realize the important factors which helps to handle the nursing decision-making process and challenge the professional to do advanced thinking for real responsibilities [1, 2].

In addition, the OSCE not only helps in assessment of students, but also provides a new strategy in evaluation and valuable influence on continuous learning. Modern theory of education also emphasized that integration of multiple tasks in the OSCE help in student learning. In the OSCE examination, students show their competence regarding nursing knowledge and skills, many studies has approved the advantages of using the OSCE in medical and nursing procedure [10]. These studies have shown that students also feel that the OSCE covers a wide range of topics. The OSCE is a useful tool involving safe practice that helps students in gain confidence in a hospital environment [6].

Clinical assessment has been developed whereby students perform an aspect of clinical care followed by a low-fidelity simulated pregnancy complication or emergency appropriate to the student's level of learning. The students demonstrate their level of knowledge and skills in a contextual environment, thus competency, safe practice, provision of high standards of care for mothers and babies are required by newly qualified midwives. Assessment in practice is challenging for midwives and educators is essential in determining fitness for entry into the profession to teach for a sense of salience that enable students to meet this challenge with confidence and competence for developing clinical reasoning skills [3].

The OSCE exam is commonly used to test trainees from various disciplines of healthcare. Many medical education institutes are paying attention to the OSCE due to impartiality, logical reliability, probability of accomplished skills, equality, creating learning motivation and maintain students' satisfaction. The OSCE has been used to evaluate those areas most important to performance of health care professionals, such as, solve problem, teach, the ability to obtain/interpret data communicate, and handle unpredictable patient behavior which are or else not possible in the traditional clinical test [4]. Most of the students followed the usual clinical nursing examinations which are not accepted as systematized tools to determine the clinical proficiency of students and clinical reasoning skills. In this traditional method, educators organize the test, observe their

performance and give the overall performance scores. So it is too difficult to handle the assessment tool for students' clinical abilities in a comprehensive manner, especially with the increased number of students [5].

Therefore, the OSCE is designed by forming a multi-station arrangement in which a student performs an assigned skill or conduct assessment using a standardized patient, while being watched by an assessor. The student is assessed in different clinical competencies through moving from one station to the next who has been allotted equal amount of time such as simulation, abdominal examination, nursing diagnoses, interpretation of clinical data, and so on [20]. The validity (a measure of the extent to which the test actually measures what is intended to measure) of the examination improves as the number of stations increased. A ring of a bell and stopwatch were used to control the students who enter and leaves the station. At the end of the allotted time, the student leaves the station and moves on to the next one. Similarly, each student performs the same tasks and was marked and assessed according to the same assessment criteria on the examiner's mark sheet. The assessor uses the checklist or rating scale to rate each student's performance through direct observation. The final mark sheet can be made based on a performance checklist- or a combination of a checklist and a global score [1].

A traditional written examination assesses cognitive knowledge, which is only one aspect of the competency. Traditional clinical examination basically tests a narrow range of clinical skills under the observation of normally two examiners in a given clinical case. The scope of the traditional clinical exam is basically patient histories, manifestation of physical examinations, and assessment of a contracted frequent of technical ability. It has been shown to be largely uncertain in testing students' performance and has a broad, secure of variability between one examiner and the other [7]. Data gathered by the National Board of Medical Examinations in the USA (1960–1963), embarrass over 10,000 medical students explain that the relation of uncontrolled evaluations by two the examiners was less than 0.25. It has also been demonstrated that the chance of the gain in a choice of examiner and the patient act an important role in the result of postgraduate examinations in psychiatry using the traditional method. Published findings of researchers on OSCE, has reported it to be reliable, valid and objective with cost as its only major drawback. The OSCE, however, covers a broader range like problem solving, communication skills, decision-making and patient management abilities [19].

Apart from its broadening scope, its objectivity, reproducibility, and easy recall are added to its advantages. All students get examined on predetermined criteria on the same or similar clinical scenario or tasks with marks written down against those criteria, thus enabling recall, teaching auditing and determination of standards. In a study from Harvard medical school, the students were found to do promote on interpersonal and clinical skills than on explanatory or consultative skills [6]. This allows for review of teaching technique and curricula. Performance is judged by a team of many examiners in-charge of the various stations of the examination. Also, it has advantages to both the examinee and the education criterion of the institution as the result of the inquiry is not affected by disadvantage and standards get resolved by a lot more teachers each appearance in a especial issue in the education. The OSCE chooses much short period to start examining more students at any stated time over a broader frequency of subjects [8].

Disadvantages of the OSCE numerated by [11] as; it's very funds emphasizing, longtime planning is a need, external examiners need for be satisfied for the procedure, need to a large number of observers, examines the selected topic not cover all topics, and observer exhaustion. Moreover, common mistakes of the OSCE , For all stations are as a general; not checking patient identification , not gaining consent from the patient, not listen to the patient, touching the patient before conduct hand washing, not ensure patient safety, not examination for allergies, lack of communication, not reading the scenarios accurately, and not finishing the station within the timeframe.

Additionally, classified errors, according to the processes as assessment; not completing the vital signs perfectly, and not completing the documents sufficiently. Planning; evaluation date not within the approved time frame, incomplete records, not allowing for elements of self-care for the patient, impossible to read the documentation, abbreviations not familiar and errors do not remove with correctly. Implementation; not consider the medication rights. Evaluation; abbreviations not recognizable, a reason for admission or date of admission lost, and errors not omitted with correctly [23]. Administrative support, assessment of any friendly certainly appoints an enormous amount of administrative duty. The OSCE is no exclusion to this and by ensuring there is sufficient administrative support to experience these necessities, the OSCE guidance will have more time to lecture the academician considerations. Tasks such as the placing of students to examination centralized, arrangement of inquiry paperwork and the touching of inquiry results should mentally be managed by a dedicated administrative team [24].

2. Significance of the study

Newly qualified obstetrics and gynecology nurses are required to be competent, safe practitioners providing high standards of care for mothers and babies. The role of educators is to teach for a sense of mastery to enable students to meet this challenge with confidence and competence and to develop clinical reasoning skills. The

difficulty of formulating an assessment that captures all these elements is alarming for all nurse educators. Knowing the perception of student nurses about the OSCE will be a guide to improve the implementation of the exam and reformulate it in a way that overcome the obstacles and alleviate students' anxiety [18] [21]. In addition, from the researchers' clinical experience, they found that there was poor knowledge and negative perception regarding the OSCE among maternity nurses. Hence, it is imperative to raise nursing student's knowledge and perceptions about recent issues of the OSCE. This study was designed to evaluate the overall perception of Qena nursing students regarding the OSCE as a method of evaluation and discover their suggestions to improve it.

3. Aim:

To evaluate nursing student's perceptions regarding the use of the Objective Structured Clinical Examination as a nontraditional method of clinical evaluation.

4. Research Questions:

What are the perceptions of the third year nursing students regarding the OSCE?

What are the advantages and disadvantages of the OSCE as perceived by the nursing students?

Is An Objective Structure Clinical Examination can be examined as form of objective evaluation method for estimating the performance of clinical assessment of third year nursing students?

5. Subjects and Methods

5.1. Research design:

A cross sectional study design was utilized to fulfil the aim of this study.

5.2. Setting:

This study was conducted in the OSCE Lab at Qena Faculty of Nursing, South Valley University.

5.3. Sample: A random sample of (88) third year nursing students studying in the above mentioned setting at the time of the data collected were included in the study.

5.4. Tools of data collection:

One main tool was used for data collection:- structured interview questionnaire: It was designed by the researchers after reviewing related literature. It encompassed two major parts:

First part included nursing students' questionnaire about the examination attributes, which involved the quality of instructions and organization, the quality of performance, authenticity and transparency of the process, students were asked to record their recommendations and suggestions to improve the process.

Second part included students' perception regarding the use of the OSCE as an assessment tool; to evaluate the advantages and disadvantages of the examination.

5.5. Ethical considerations:

Essential legal acceptance was acquired from the ethics committee of the faculty of Nursing, South Valley University to collect the necessary data after explaining the purpose of the study. The legal acceptance must be acquired from the authorized person in the Obstetrics Department at Faculty of Nursing, after that ethical approval. The students' approval was obtained by explaining the significance of the study to them and the researchers assured them the confidentiality of data collection.

5.6. Validity and reliability

The tool utilized as a part of the study was checked for its content validity by a jury of 3 specialists in the field, recommended modifications and reconstruction of the tool were done. The tool has high reliability with Cronbach alpha coefficients 0.76 for the total scale.

5.7. Pilot study

The pilot study was carried out on 9 student nurse (about ten percent of the total sample) to test the clarity and applicability of the study tool as well as estimation of the time needed to fill the questionnaire. Required modifications were done. Nursing students involved in the pilot were excluded from the study.

5.8. Procedure

The following phases were adopted to fulfil the aim of the current study; assessment, planning, and implementation. These phases were carried out from the beginning of October 2016 to the end of December 2016 covering three months. The implementation included three phases:

Phase one: Preparation and validation of the OSCE stations: it consisted of Training of the scientific team on methods of developing the stations and the check- forms for objective assessment were done for a period of two days 3 hours each day. Revising the course content and preparation of the OSCE stations and its content, measuring the validity and reliability of the content of each station was done. Then 15 specified questions were developed and distributed to the validity and reliability team for content analysis and construct validity. Ten questions were selected based on the scientific review. Preparation and validation of the self- reported questionnaire (perception, advantages, disadvantages and suggestions questionnaire) was developed.

Phase two: Students were divided into four groups of 22 each. The different stations were arranged according to the gynecological curriculum with one stabled assignment at each station to be performed by each student. The OSCE examination was done using 10 stations. For each station five minutes were given to each student and one minute was given between stations to facilitate change and reading the instructions. The OSCE examination was conducted for 5 days in the Obstetrics lab.

Phase three: After completion of the OSCE examination, students were given the questionnaire to fill regarding their perception, advantages and disadvantages of the OSCE and their suggestions.

5.9. Scoring system: perception score was considered to be in between (0 – 100).

5.10. Statistical Analysis: Data were verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 25.0) was used. Qualitative analysis was done through a form of content analysis by identifying themes in student responses and grouping responses according to thematic content. The three authors individually conducted the content analysis and identified themes and final grouping of responses were developed by consensus. Descriptive statistics were used. Regression model was conducted to determine factors that cause differences in the OSCE perception's scores. Pearson correlation was computed to know the type and strength of the relationship between perception scores and other variables.

6. Results and Discussion:-

6.1 Results

Figure 1: represented that the study nursing student distribution according to gender 55.7% of male and 44.3% female.

Table (1) shows the perceptions of study nursing students regarding OSCE. It was found that 88.4% of them considered that the number of stations was enough and satisfactory. As well as, 85.2% of them considered the OSCE as the best method of evaluation. In addition, 63.6% of the students felt that it was inadequate Time of each station. While, 62.5% of them reported that the waiting time to be examined was too long.

Table (2) illustrates the advantages and disadvantages of the OSCE as perceived by the study nursing students. Regarding the advantages of the OSCE, table 3 showed that 95.5% of students highly accepted this type of evaluation. While, 79.5% of them saying the OSCE examines a wide range of knowledge & clinical skills of Obstetrics and Gynecological nursing. Related to disadvantages of the OSCE the finding found that 73.9% of them state that the difficult to fell comfort during changing station.

Table (3): presented that the study nursing students Suggestions regarding the OSCE, 79.5% suggested that they needs of training and preparation before the final exam and 8% need clear instructions before the exam also decrease waiting time.

Figure (2): Scores of the study students' for lab. Skills score related to the clinical of the Obstetrics & Gynecology Nursing. Skills score related to the skills lab ,50% of students accounted for 40 to 45 marks and 1.1% get on <30 marks.

Figure (3): Scores of the study students' for performance score related to the clinical of the Obstetrics & Gynecology Nursing. Performance score related to the clinical of the Obstetrics & Gynecology nursing, 65.9% accounted for 45 to 50 marks and no anyone obtain on 30 to 35 marks.

Figure (4): Scores of the study students' for conversation skills score related to the clinical of the Obstetrics & Gynecology Nursing. Conversation skills, only one student accounted 6 marks and 44.3% of students accounted 8 marks in conversation.

Figure (5): Scores of the study students' for perception score related to the clinical of the Obstetrics & Gynecology Nursing. The perception score presented as 9%of students accounted 20 to 40 marks and 54.5 accounted above 60 to 80 marks.

Table (4): - Shows Correlation between perception scores and Conversation skills, performance, Lab skills and gender of study students. Pearson Correlation Coefficient for “perception score” and “conversation skills score” = 0.943 with p-value = 0.000 <0.05.

This means the existence of a strong statistical positive relationship between both of them. Pearson Correlation Coefficient for “perception score” and “performance score” = 0.86 with p-value = 0.000 <0.05 which means the existence of a strong statistical positive relationship between both of them. Pearson Correlation

Coefficient for “perception score” and “lab skills” = 0.925 with p-value = 0.000 < 0.05 which means existence of strong statistical positive relationship between both of them. Phi measurement of association for “perception score” and “Gender” = 0.125 with p-value = 0.968 > 0.05 relation is considered insignificant (variables are independent).

Table (5): since p-value = 0.000 < 0.05 (level of significance) then reject the null hypothesis and accept the alternative hypothesis i.e. model is considered significant.

Table (6): Shows that, linear regression results show that English conversation skills were the most affecting reason for differences in perception score, then lab skills and at last the performance as follows:

- If English conversation score increased by 1 unit perception score would be increased by 11.29 in average.
- If lab skills score increased by 1 unit perception score would be increased by 2.823 in average
- If performance score increased by 1 unit perception score would be increased by 1.612 in average.

As p-value < 0.05 (level of significance) parameter is considered significant (not equal zero).

Table (7): Model adequacy presented that coefficient of determination (R^2) = 0.912 tells us that 91.2% of variance in perception score.

6.2. Discussion

The OSCE is considered one of the important modern methods of student assessment as a feasible tool for assessment of clinical competence for a formative and a summative purpose which has many advantages of its value, especially in medical, nursing and allied health sciences either for theoretical or clinical evaluation. There is a growing international interest in teaching and assessment of clinical skills in nursing education. It is a form of a performance-based testing used to measure students’ clinical competence, this includes making a diagnosis, investigation interpretation, communication skills, instruments identification and performing certain procedures [8].

This study was carried out to evaluate nursing student’s perceptions regarding the use of the Objective Structured Clinical Examination as a nontraditional method of clinical evaluation. Additionally the findings of the present study achieved and supported the research question.

As regards the third year nursing students Perceptions, The findings of the study showed that the OSCE is perceived as a fair and objective examination method, because everyone is assessed on the same kind of procedures at the same time with a pre-prepared checklist. As far as, most of the nursing students stated that the OSCE covered a wide range of skills in a well- designed theme. This finding was in the same line with [9], who studied qualitative study exploring the health care student’s experience,” mentioned that the majority of students have the awareness about the OSCE due to the information gathered from faculties and enlighten about the OSCE prior to the exam. The information provided by faculties before the exam is very important. This may be due to thorough preparation and information of the students about the goals and objectives of the OSCE sessions as the sessions will cover an area of content that they already know and should be allowed them to ask questions if they are not confident about the task to perform the clinical skills.

The findings are same with the results of [16], who concluded that nursing student’s perceptions and acceptance of the OSCE were positive as an accepted tool for clinical evaluation, which appears in student feedback confirmed, so as to fairness and easier to cover a wide range of knowledge base proving as an excellent tool for assessment, and also considered a more objective method of assessment than the traditional method. Furthermore the findings of the present study similarity with [22], who concluded that, the OSCE is a very important tool for clinical competency evaluation that will soon be included in national medical practitioner license tests for medical students worldwide and improving the quality of the OSCE in assessment of student’s ability such as actual management of a patient in an emergency situation.

On investigating the stressful situation of the studied sample regarding the OSCE examination, the findings of the current study revealed that nearly three fourth of the students found the OSCE to be mentally stressful. The present study findings in the same with [10] reported that students perceived OSCE was more stress full experience. This may be due to express the emotional situation of the student who knew that they will be tested using a new methodology testing without thorough explanation or training which put them in stress. However, this study in congruence with [5] who found that, the most of students agree with the comments on the OSCE examination set-up and they also express their view that the examination environment is noise free, with sufficient lighting, although the students stress level during the test, prolonged preparation, expensive and requirements of the faculties.

However, it is created very clear from the study that OSCE is structured in a thorough manner and the objective test of the clinical ability of nursing was competently taken care. Concerning student’s perceptions towards the advantages of the OSCE as an examination method, the findings of the current study revealed that the majority of students’ perceived OSCE examination as the best method. According to them, they felt safer in their lab than real situations. Also, the majority of the studied students agreed that OSCE is a accepted method of clinical examination and relevant to their curriculum. These findings are in the same line with [12], who reported

that OSCE is a superior mode of examination as it involves multiple competencies to be assessed, which makes OSCE a good method of assessment. In terms of learning, OSCE is found better than traditional one. Furthermore [13], added that OSCE is a better method of examination comes from the students' feeling that they are in their comfort zone in their lab and they will be judged by more than one evaluator using a pre-developed checklist make them appreciate the objectivity and the validity of their evaluation.

Consequently, this finding is quite expected and is consistent with [15] who reported that, there are a variety advantages of the OSCE, as integrates theory & practice; it provides a safe environment for the nursing students to improve their own learning abilities, it overcomes the need for a large number of clinical instructors required to deal with a high number of students, and it provides consistent and equitable marking of the OSCE stations. Additionally, these results are in agreement with [17], who concluded that the OSCE is a superior evaluation of clinical competence, as it facilitates the assessment of complex skills, knowledge, and attitudes viewed as the underpinnings required for competent clinical practice.

Regarding nursing students' perception about the disadvantages of OSCE, most of the studied sample reported the lack of training as the most important disadvantage. The findings are congruent with the results of [14], who clarified that the need for adequate training and preparation of the OSCE by students, also illustrated that to be a method to overcome anxiety and fear of examination. This finding could be because the OSCE is considered as a versatile multipurpose evaluation method to assess the competency of students. In general, most the nursing students in the present study suggested that the need for more training on the use of OSCE as a nontraditional method of examination to improve their training needs through the OSCE experience. This finding was supported by [14], which suggested that training workshops on the nature of the coming exam are considered an effective tool for healthcare professionals. This suggestion may allow the students to be well prepared and trained on the methodology and get used to the setting & nature of the exam and granted them the opportunity to ask questions for any further clarification and perform better in the actual the OSCE.

According to the Pearson r values found in our study, there appears to have been The Pearson correlation coefficient for "perception score" and "conversation skills score" = 0.943 with p-value = 0.000 <0.05. This means the existence of a strong statistical positive relationship between both of them. The Pearson correlation coefficient for "perception score" and "performance score" = 0.86 with p-value = 0.000 <0.05 which means the existence of a strong statistical positive relationship between both of them. The Pearson correlation coefficient for "perception score" and "lab skills" = 0.925 with p-value = 0.000 <0.05 which means the existence of a strong statistical positive relationship between both of them. While, the Phi measurement of association for "perception score" and "Gender" = 0.125 with p-value = 0.968 >0.05 relation is considered insignificant (variables are independent) (table 4). This finding supported by [27], stated that the OSCE is a fair tool for evaluating clinical skills, students see the OSCE as a correct value for necessary clinical being evaluated, standardized, and not disposed by individuality or social relations.

Furthermore, the linear regression analysis in this finding create that the English conversation skills were the most affecting reason for differences in perception score, then lab skills and at the last performance as follows: If English conversation score increased by 1 unit perception score would be increased by 11.29 in average. If lab skills score increased by 1 unit perception score would be increased by 2.823 in average. If performance score increased by 1 unit perception score would be increased by 1.612 in average (table 5). In general, the study results, it can be concluded that the perceptions of the third year students were positive relationship regarding the OSCE. Reported by other studies, the student progression in communication and clinical skills improved significantly over time. Survey results indicated that students felt the OSCE was well-structured and assessed clinical skills.[28, 29].

The results of the study revealed that the implementation of the OSCE is request excessive effort, large funds and time-consuming. Also, require a huge number of competent staff to observe and evaluate students during the OSCE. This was described in other studies which implemented the OSCE [25, 26, 27].

7. Conclusion

In the light of the study findings, it can be concluded that the perceptions of the third year students were positive regarding the OSCE as a modern method of examination since it is objective, safe and they felt more confident. Most of the nursing students agreed that the length of the sessions, the content were satisfactory and well organized. However, most of them reported that they felt uncomfortable and stressed from waiting to be examined. Furthermore, the above-mentioned findings proved and supported the research questions.

8. Recommendations

Based on the findings of the current study, the following recommendations can be suggested:

- Adequately planned training programs related to the OSCE examination must be established to relieve the stressful among nursing students in order to improve the clinical competency that will be reflected in their skills.

- Increase the funds and number of skilled staff to observe and evaluate students during the OSCE.
- Replication of the research on a large probability sample is recommended for generalizing the findings.

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Tables and figures:-

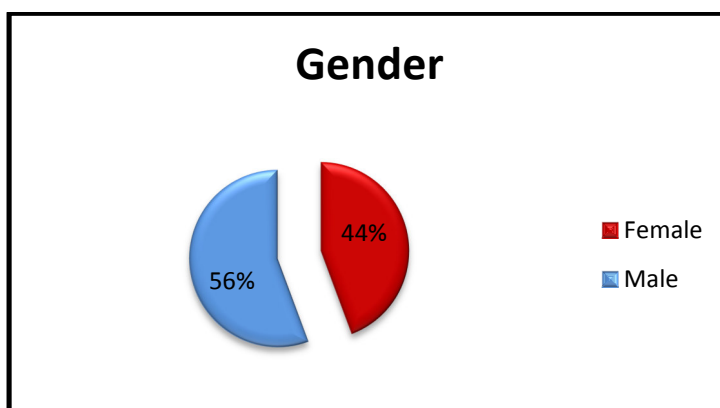


Figure (1) the Study Nursing Student Distribution According to Gender.

Table (1): The Perceptions of the Study Nursing Students Regarding the OSCE

Item	Yes	No
The OSCE is the best mode of evaluation than a traditional exam	75 85.2%	21 14.8%
It is covering a wide range of skills	74 84.1%	14 15.9%
It minimizing the chances of subjectivity	65 73.9%	23 26.1%
An arrangement of station and well -sequences	68 77.3%	20 22.7%
Adequate Time for each station	32 36.4%	56 63.6%
Clear written instructions at the OSCE stations	51 58%	37 42%
Number of stations was enough and satisfactory	77 88.4%	11 12.6%
Waiting time of examination was appropriate	33 37.5%	55 62.5%

Table (2): The Advantages and Disadvantages of the OSCE as Perceived by the Study Nursing Students

Advantages of the OSCE	Frequency	percent
The OSCE is highly accepted as a new method of assessment	84	95.5%
The OSCE gave an equal chance of each student	82	93.2%
The OSCE examines a wide range of knowledge & clinical skills of Obstetrics and Gynecological nursing	70	79.5%
It is more objective than traditional exams	74	84.1%
Giving feedback about the test results make it the safe environment to be examined	77	87.5%
Disadvantages of the OSCE		
Difficult to feel comfort during changing station	65	73.9%
The waiting time to be examined was too long	55	62.5%
Exam put the students in stress and anxiety	63	71.59%

Table (3): The study students Suggestions Regarding the OSCE

Suggestions	Frequency	Percent
1. Needs of training and preparation before the final exam	70	79.5%
2. Decrease waiting time	7	8%
3. Need clear instructions	7	8%

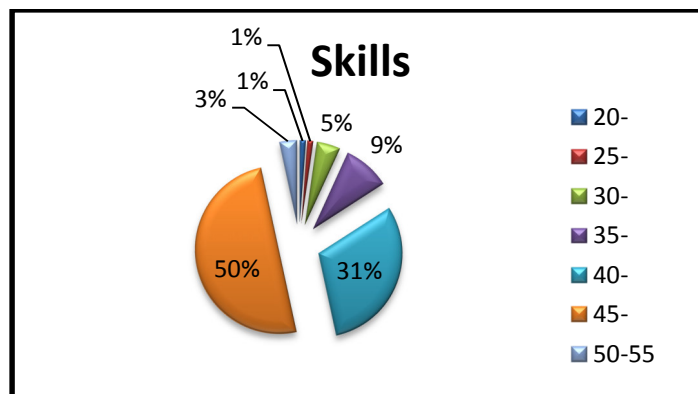


Figure (2): Scores of the Study Students' for lab. Skills Score Related to the Clinical of the Obstetrics & Gynecology Nursing.

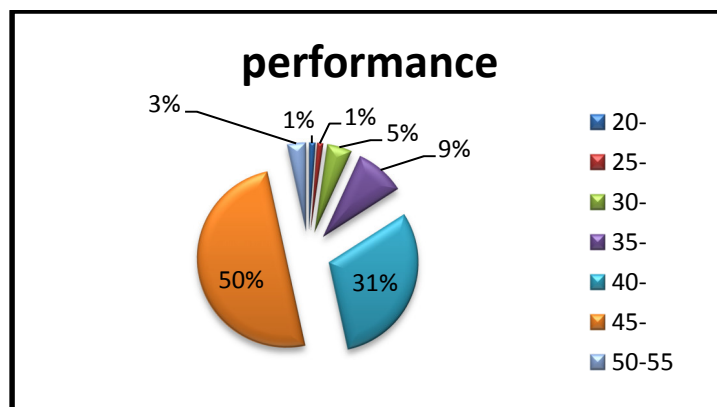


Figure (3): Scores of the Study Students' for Performance Score related to the Clinical of the Obstetrics & Gynecology Nursing.

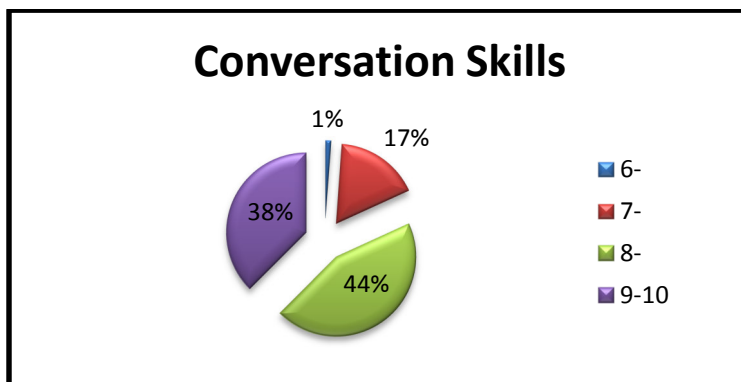


Figure (4): Scores of the Study Students' for Conversation Skills Score Related to the Clinical of the Obstetrics & Gynecology Nursing.

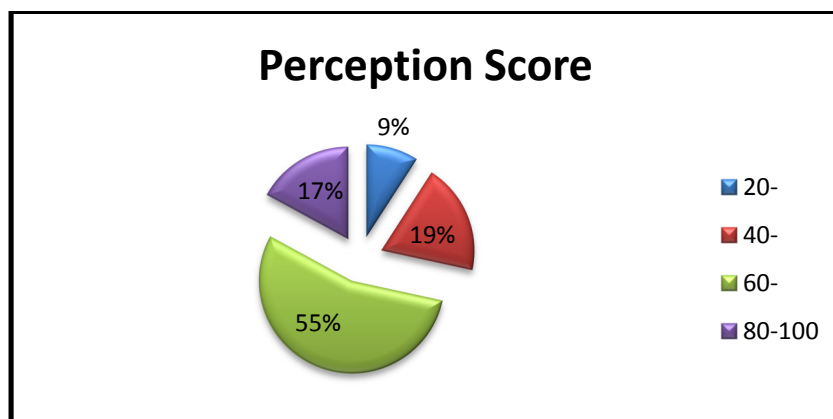


Figure (5): Scores of the Study Students' for Perception Score Related to the Clinical of the Obstetrics & Gynecology Nursing.

Table (4): Correlation between Perception Scores and Conversation Skills, Performance, Lab Skills and Gender of Study Students.

Variables	Measures of Association	Value	Significance (p-value)	Decision	Interpretation
Perception score & Conversation skills	Pearson correlation (R)	0.943	0.000	Reject null hypothesis	Strong Positive Statistical Relationship
Perception score & Performance	Pearson correlation (R)	0.86	0.000	Reject null hypothesis	Strong Positive Statistical Relationship
Perception score & Lab skills	Pearson correlation (R)	0.925	0.000	Reject null hypothesis	Strong Positive Statistical Relationship
Perception score & Gender	Phi	0.125	0.968	Retain null hypothesis	Variables are independent

Null hypothesis: Variables are independent

Alternative hypothesis: there is a statistical relationship

Table (5): Regression's ANOVA Table

Model		Sum of Squares	df.	Mean Square	F	Sig.
1	Regression	21084.180	4	5271.045	216.065	.000
	Residual	2024.840	83	24.396		
	Total	23109.020	87			

Table (6): linear Regression's Parameters
 Null Hypothesis: Regression Model Coefficients = 0
 Alternative hypothesis: Regressions Model Coefficients Significant

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.(p-value)
		B (parameters)	Std. Error	Beta		
1	(Constant)	72.387	13.824		5.236	.000
	Conversation	11.290	2.424	.493	4.657	.000
	Performance	1.612	.605	.427	2.663	.009
	Lab Skills	2.823	.710	.880	3.973	.000
	Gender	1.345	1.073	0.041	4.675	0.213

Table (7): Model Adequacy

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.955 ^a	.912	.908	4.93920