

## Nursing field teaching staff perception toward using objective structured clinical evaluation to evaluate nurse's students



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### ABSTRACT

The purpose of this study is to explore the perception of nursing field teaching staff to apply objective structured clinical evaluation in evaluation the nursing students. Quantitative basic experimental longitudinal designs. The total number of the valid cases (n=80), the Likert scales include 35 items, the largest proportion of participants was the age 30-33, Participants were 49 men and 31 women. The researchers answer the main question about the perception of nursing field teaching staff about using objective structured clinical evaluation to evaluate the clinical competencies among undergraduate nursing students. By using regression analysis, a significant regression equation was founded and the curve model strongly fit (F1, 79=209.391),  $p < .000$ , R-square=0.726. Plot model reflects most of the participant answer between agree (4) and strongly agree (Mean=4.29). There is a significant positive perception among nursing field teaching staff toward using objective structured clinical evaluation in nursing college at the University of Hail. There are no significant differences between male and female toward these positive perceptions to initiate objective structured clinical examination.

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### 1. Introduction

The objective structured clinical evaluation (OSCE) used in medicine in 1975 and has been developed by Roland Harden in Scotland (Sukhato et al., 2016). Since 1979, OSCE became widely used as an effective instrument for evaluation health competencies (Mitchell et al., 2009). In 1984, school of nursing at McMaster University develop OSCE to assess clinical competencies among primary health care nursing in third year student's, but in 1985 become more adopted method of all nursing skills in Canada (Ross et al., 1988). Harden developed OSCE in 1990-1992 to become more formative and summative and by time he was trying to make OSCE more objective (Courteille et al., 2008). Now, we can see all nursing collage using OSCE as a formal method (Courteille et al., 2008; Ross et al., 1988). Last four decade there has been a various method of nursing student clinical evaluation, OSCE used to assess clinical competencies in medicine and gaining more applicability in nursing educations. OSCE had been gained approval as benchmarks for practice

evaluation and adopted by many health profession include nursing (Naumann and Moore, 2012). OSCE use to evaluate practice using objectivity in nature, in practice, Nursing field teaching staff (NFTS) can assess knowledge and skills in one period of time (Ross et al., 1988). Nursing and other health professions considered highly significant psychomotor component, which permits students' to apply principles that learned in the classroom in a safe and competent manner (Knight, 2016; Sukhato et al., 2016). Collage of nursing helps their students to acquired knowledge, practice and communication skills after complete nursing program (Morsy et al., 2014). Nursing will still dependents on practice, which occupied cornerstone in healthcare system (Chabeli, 2001; Obizoba, 2014). Nursing includes knowledge domain, affective domain to insure safety among patient and psychomotor domain to make nurses' more skillful (Omu, 2016). NFTS has a higher chance to influence students' learning and can make positive or negative shape for nursing practice (Ismail et al., 2015; Sukhato et al., 2016). Using OSCE considered imperative reason for client safety; minimize risk, students' motivation, progression of clinical competences (Mitchell et al., 2009; Morsy et al., 2014). Nursing practice always face a problem during evaluating students' including subjectivity and complexity, that's why many institution renew curriculums and move toward using OSCE.

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Practice in nursing considered significant component in nursing program and considered as heart of nursing education. Practice managed and supervised by NFTS whom also considered cornerstone of nursing program (Ismail et al., 2015; Chabeli, 2001). NFTS have good experiences on bedside care but they have little experience in laboratory education and evaluation (Johnson, 2016). Many of expert in practice' migrate in learning process because shortage of NFTS in learning institutions (Johnson, 2016). NFTS had multi-dimension mission includes assess knowledge, critical thinking, communication and practice professionalism of students, so providing information and guideline to NFTS on how to evaluate students in practice considered important to create appropriate grading system (Johnson, 2016; Parsh, 2009). Evaluation in practice considered milestone of increasing reliability, decrease bias and increase patient safety (Alsenany and Al Saif, 2012; Johnson, 2016). If NFTS not adapt as educator this will create stressors toward students, instructors and whole nursing program, NFTS in practice considered key factor to provide positive students' experience, meet course outcomes and positive impact toward student's and program success (Johnson, 2016). Using OSCE to assess nursing professional competencies make nursing program clear and fulfill outcomes achievements (Omu, 2016). Positive perception of clinical instructors considered significant to develop nursing profession and program and produce knowledgeable, skillful, confident students' in health care system (Ismail et al., 2015; Chabeli, 2001). NFTS need to assess frequently and attend workshop because they lack of experience in education and students assessment to become effective educators to ensure program success (Johnson, 2016). NFTS play an important role to provide positive and active clinical experience if NFTS experience in education equalized clinical experience (Parsh, 2009). All nursing institutions should overcome shortage of nursing due to elevation the numbers of students acceptance in nursing collage, increasing enrollment of students create an importance to increase numbers of NFTS to meet program requirements, which obligate nursing institutions to provide expertise NFTS in patient care with lack of basic experience in education, which finally make NFTS feel of insufficiency, and increase weakness in program (Johnson, 2016). NFTS are the key factor in job satisfaction and retention in nursing career and decreasing burnout among new graduate nurses (Johnson, 2016). Assessment ability of undergraduate students' in nursing practice considered difficult due to lack of objectivity and the method of evaluation is not structured well, which mean nursing institution should use highly standard method of evaluation like (OSCE) (Alsenany and Al Saif, 2012).

The purpose of this study is to explore and compare perception of NFTS regarding to use OSCE to evaluate undergraduate nursing students' at

University of Hail (UOH). The researchers would like to answer the question "Among NFTS in UOH nursing collage, what are the perceptions of NFTS about using (OSCE) to evaluate clinical competencies among undergraduate nursing students'? additional questions that the researchers want to answers includes Among NFTS in UOH nursing collage, what is the difference of perception among male and female NFTS about using (OSCE)? And what is the difference of perception among NFTS who had more than 5 years' experience or less toward using (OSCE)?

## 2. Theoretical framework

### 2.1. Benner's framework

Benner (1984) obtained the meaning of expert nurses who have developed his\her skills, perception and understanding patients care over the time through a sound of educational base as well as a multitude of experiences and describe level of experience in nursing start from novice, advanced beginner, competent, proficient and finally expert, she focus on developments of knowledge through practice knowledge, finally she form a theory focus on practice to increase understanding and perception of nursing career which start from low level of experience to become finally expert

### 2.2. Theory of florence nightingale

She said the goal of nursing to put patient in best conditions for nature upon him as a researcher we applied this theory we will put students' in real situations during education and evaluation to maintain effective learning and make environment of training near to real hospital care to make NFTS and students' understand, adapt and accept OSCE. And finally ensure best patients' care.

### 2.3. Researcher's framework

Researches focus on role of faculty to initiate practice evaluation using OSCE and assist NFTS to formulate tools of evaluation with identified characteristics, away from subjectivity, using summative method and encourage NFTS to give feedbacks toward students' after evaluation to increase acceptance of OSCE among our concern "NFTS" and students, because NFTS considered the core of any nursing collage, Fig. 1.

Perception of nursing field teaching staff (Dependent variables) is the understanding, accept of using OSCE as a formative method to evaluate clinical competencies among students' in practice. Nursing filed teaching staff (NFTS) includes all nursing faculty members assigned to clinical course in nursing collage at UOH having a master degree and having clinical experience and pre-prepared to using OSCE as a formative method to evaluate

clinical competencies among students' in lab and hospitals.

Independents variables, OSCE is a way of clinical evaluation used in nursing collage at UOH by utilizing a multistep checklists in an objective, structured manner and consist of many stations, students will pass in all station and evaluate by NFTS to assess his\her skills competencies to be sure

these undergraduate students' can be handle nursing care with patient in safe manner and good communication. Clinical training is the health care environment includes direct interaction with nursing procedures using Manikin to teach students in proper way to help students for critical thinking and problem solving strategies.

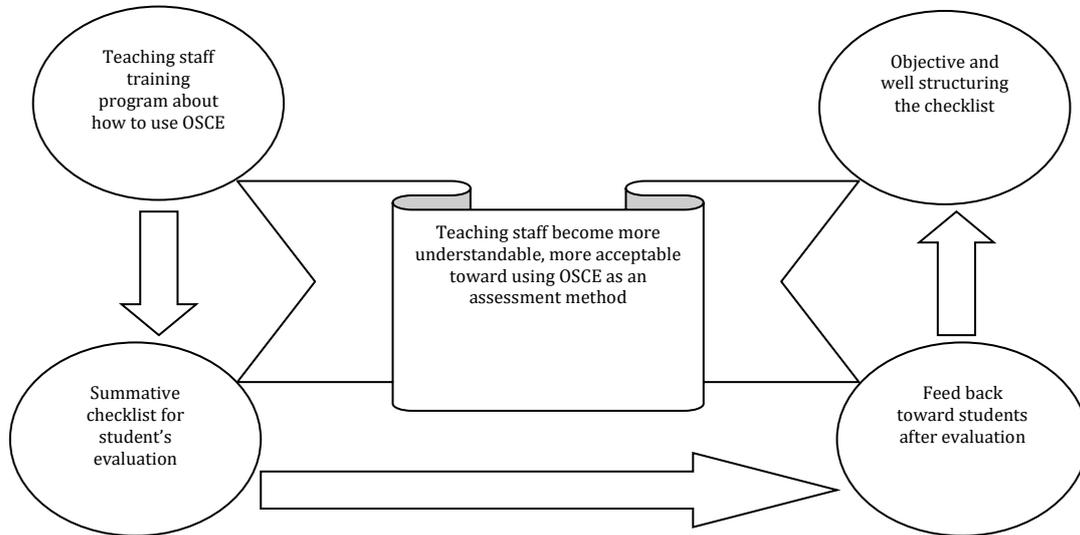


Fig. 1: Research framework

### 3. Lecture review

Source of data used in this study Started with electronic search using full copies of relevant studies from CINAHL, MEDLINE and Google search.

Importance of OSCE, Simulated training created as a result of increasing number of students enrolled in nursing program which create a new problem "clinical placement shortage" which obligate the collage to make training using simulated facilities. In addition to clinical shortage all nursing institutions give students' classroom theory lecture and need to learn him practice part in the same theory part, NFTS should focus to make practice near real situation to provide qualified nurses' and maintain successful of nursing program (Parsh, 2009). Aims of evaluation among nursing students' in laboratories and hospitals are to improve psychomotor aspect. In Canada all nursing institutions which graduate register nurses now use OSCE to assess competency for students during practice (Omu, 2016). OSCE provide an extensive range of clinical competencies that reduced risks of bias and develop practice (Morsy et al., 2014). OSCE using simulation enable NFTS to select many scenarios and competencies appropriate to students' courses content and permit students to rotate in all these competencies which permit him to use critical thinking and maintain safety (Knight, 2016; Obizoba, 2014; Parsh, 2009). Practice especially in health care program should focus in critical thinking and problem solving, the way to achieve this importance items by using OSCE in our education and evaluation in practice (Chabeli, 2001). Therefore OSCE become logistic human needs for nursing students' and

nursing programs (Obizoba, 2014). NFTS considered the keys of curriculum successful, so providing support and education toward NFTS maintain successful of students, NFTS and programs satisfaction, on the other hand using OSCE by NFTS can develop practice and critical thinking among students' (Johnson, 2016; Parsh, 2009). NFTS play an important role to facilitate training for undergraduate nursing on simulations to meet intended learning outcomes of nursing curriculums, on the other hand poor planning and poor effective facilities for training and education cannot meet intended learning outcomes and suffer to dissatisfaction among students and NFTS, which effect on nursing program (Mitchell et al., 2009; Parsh, 2009). Using OSCE reflect stability, reliability, minimize subjectivity and increase objectivity when assess clinical competencies. OSCE provide more holistic care if it's compared with other focused examination (Mitchell et al., 2009). OSCE more applicable in medical surgical procedures rather than others, but we can also use it in other courses includes maternity, mental and pediatric courses (Bora et al., 2005).

OSCE describe as a practice measurement, previously measurement of practice done by many ways includes self-assessment and direct observation in practice, or both methods combined together. These methods had a problem of subjectivity in clinical evaluations because NFTS cannot control of extraneous variables which includes emergency situation, doctors round, risk on patients, visitors and finally permission from patients. OSCE was developed in 1975 to minimize bias and improve feedback during laboratory

evaluation (Alsenany and Al Saif 2012). OSCE it's an acronym of OBJECTIVE STRUCTURED CLINICAL EVALUATION, in popular mean summative evaluation of nursing care competencies (Chabeli, 2001). OSCE considered objective and standardized method to evaluate students' clinical performance (Naumann and Moore, 2012; Obizoba, 2014). OSCE include different stations, students should pass and capable to complete all these stations, sometimes each station considered independent (Alsenany and Al Saif, 2012), each basic station spending time from 5–10 minute (Chabeli, 2001). One or two NFTS would supervise and evaluate students' performance in practice using summative checklist sheet (Morsy et al., 2014). The two evaluators in same station should have less than 30% discrepancy after sum marks of students (Chabeli, 2001; Naumann and Moore, 2012). The students' evaluated against checklist prepared by NFTS to evaluate performance in addition to improve skills of critical thinking, problem solving and decision making (Chabeli, 2001; Parsh, 2009). All exams using OSCE, faculty should identify committees and leader of all these committees to control entire examination (Chabeli, 2001). OSCE become extensive applicability to many different levels of students start from first to fourth years and post-graduation, also it can be used for orientation program among new nurses (Dastjerdie et al., 2010; Mitchell et al., 2009). OSCE became an accepted method in many health care profession focuses on "show how" not only say when applying procedures (Ross et al., 1988).

Method of evaluation of Clinical competencies evaluation considered important of any health care profession (Mitchell et al., 2009). Nursing programs provide required information to NFTS about how to evaluate of students in practice and make this method more applicable (Johnson, 2016). Subjectivity of traditional evaluation method in practice considered conflict to NFTS because not all NFTS have same clinical experience (Obizoba, 2014). Evaluating students' during practice considered highly demand depend on skills of NFTS (Naumann and Moore, 2012). NFTS attending workshops about how to evaluate students using (OSCE) in practice considered vital need to permit reliability in grading system which can be described as a gatekeeper strategies for nursing profession in all levels, undergraduate and postgraduate nurses (Johnson, 2016).

Comparing OSCE versus others traditional methods, the traditional method of learning process previously used to improve psychomotor domain by applying pre-determined procedures on real patient according his needs, but you cannot as NFTS permit all students to apply this procedure in same patient, that's way new modern method (OSCE) permit to repeat procedures safely and encourage demonstration in laboratory before applying procedure on real patients, also on same manikin we can apply many procedures, in the past most of nursing institutions utilize NFTS in practice to train students, all NFTS usually registered nurse apply

patient care with insufficient training to evaluate nursing skills which lead to put nursing under threats, while OSCE are complement for psychomotor evaluation for fundamental courses in nursing (Omu, 2016). Using OSCE for students on same setting, rotation and using same answer checklist to assess skills on same manikin will minimize bias which created by real patients skills evaluation, OSCE emphasized both students and NFTS on clinical skill focusing (Obizoba, 2014; Omu, 2016). Traditional method has simply focus in students memorizing steps and excluding given proper, safe care toward patients, students become complain of defect in problem solving, critical thinking and communication skills (Morsy et al., 2014; Obizoba, 2014). Letter O in OSCE is objective, so OSCE fair and comprehensive to evaluate practice which helps NFTS to minimize subjectivity during evaluation (Obizoba, 2014). OSCE method becoming an international method and wide spread in all countries, it was used in USA, Canada and Australia, other countries gained an acceptance to used OSCE in academic area especially in health care courses includes medicine, nursing and laboratory (Morsy et al., 2014). Many universities found that the OSCE in nursing collage reflect reliability and stability, like University of Adelaide, Philadelphia, Toronto, Texas, Galveston, Kentucky, Detroit and Pontiac, Michigan, Maastricht University and Netherlands University. Practice become more effective after widely used in clinical education includes medicine, respiratory care, pharmacy, nursing, physical therapy and clinical psychology (Knight, 2016). Nursing Curriculum improvement by many universities was starting, using OSCE like California University, 63% of nursing program covered by simulation clinical training and planning to increase the number to 75%. Number of nursing institutions using OSCE will be increase on the next becoming years (Parsh, 2009).

Advantages of OSCE and positive perception of clinical instructors considered significant to develop nursing practice and produce knowledgeable, skillful, decision maker, problem solver and confident students' in health care system in safe and complete manner (Ismail et al., 2015; Parsh, 2009). OSCE method considered easy to use and many stations can be prepare for many skills in all nursing courses, OSCE considered valuable to maintain greatest advantages to integrate with practice and theoretical course. OSCE session including scenario, simulation and case study to improve nursing program and make nursing care toward patient safe and free of risk (Alsenany and Al Saif, 2012; Parsh, 2009). Practice in laboratory can be considered objectivity if it's evaluated through OSCE (Obizoba, 2014). Some of NFTS stated that using OSCE is important to enhance positive attitude toward learning process, competencies (Chabeli, 2001). Many researches reflect that OSCE increase validity and reliability of clinical evaluation by using scenarios on manikin which reflect a real situations (Naumann and Moore, 2012). Many researches

mentioned that OSCE have intrinsic advantages includes it's summative and formative method, also it's well structured, followed by extensive feedback toward students which permit him to learn and eliminate LUCK during evaluation (Mitchell et al., 2009).

Disadvantages and the most breakdown of using OSCE include the level of stress among NFTS during evaluation and financial situation to prepare and run OSCE (Omu, 2016). OSCE considered more expensive than the traditional method and consuming time because advanced manikin are expensive and student need to apply all steps in all stations (Alsenany and Al Saif, 2012; Obizoba, 2014). OSCE can lead to dissatisfactions and frustrations for NFTS and students', that's why all methods of assessment should eliminate stress as much as possible especially evaluation by checklist, Some of OSCE evaluators says to students you should be alert about you miss to say some point while he was already performed it, so observation of NFTS considered sharp (Chabeli, 2001).

Many researches stated that the previous perception of NFTS toward using OSCE become more applicable and acceptable (Johnson, 2016). Many researches also shown that NFTS can influence in both students and his perceptions toward using OSCE method in practice (Knight, 2016). NFTS are the pivot point in nursing schools to develop the level of students in critical thinking, problem solving, decision making, and make environment more motivated to permit undergraduate students integrating and learning new skills in easy manner and finally provide positive clinical environment (Parsh, 2009).

NFTS roles are important to motivate students, decrease burnout and enhance satisfaction among students' in addition; effective characteristic of NFTS enhances educational curriculms (Ismail et al., 2015). Practice needs highly expert, knowledgeable NFTS to know how to deal with learning, evaluation process and developing program (Chabeli, 2001; Ismail et al., 2015; Knight, 2016). Without him, OSCE become difficult to handle and consume time and evaluator become exhausted and dissatisfaction (Chabeli, 2001). To insure Successful of OSCE, NFTS should give direct feedback to students about performance to enhance his practice and become more efficient (Alsenany and Al Saif, 2012; Ismail et al., 2015; Parsh, 2009). Faculty institution should plan programs toward NFTS including how to assess students using OSCE. Supporting and develop NFTS will maximize him knowledge and practice to be sure the clinical performance of students' is safe and fair enough (Chabeli, 2001; Johnson, 2016). Nursing administration must establish orientation program for newly NFTS to handle OSCE and improving learning process (Ismail et al., 2015; Knight, 2016). Nursing program need continuous development for OSCE by educational institution to provide standardize way to evaluate students in practice and laboratory (Hrachovy et al., 2000; Obizoba, 2014). Guidance coming from NFTS to stakeholder should

be utilized to support OSCE (Chabeli, 2001; Obizoba, 2014). Therefore, NFTS should prepare and develop programs to improve role of NFTS. OSCE considered necessary to reduce gap exist between practice and education especially in nursing study to insure optimal program benefit (Johnson, 2016).

#### 4. Research design

To answer research questions, researchers use quantitative basic experimental longitudinal design, and apply posttest after 6-9 month of interventions (OSCE training program for NFTS, and apply evaluation among students).

Setting, the current study was conducted for all faculty in nursing collage at UOH, nursing collage established in 2011, purpose of nursing collage to prepare qualified nurses with a higher chance to cover Hail hospital and hospitals around Hail city, there are 80 NFTS responsible to educate 426 students' in nursing practice course, in many academic years from first to forth year. Target population are all NFTS (80NFTS) in nursing collage at UOH, entire population considered same population, entire population considered representative sampling.

Inclusion criteria includes all females and males with different ages NFTS from UOH\ nursing collage despite years of experience, NFTS who attend lectures about introduction of OSCE, training program about how to use OSCE and had master or bachelor degree.

Exclusion criteria includes all NFTS outside UOH or who is temporary assigned to teach in nursing collage at UOH for period less than six month and NFTS with emergency leave or maternity leave procedure will start from December-2016, by the following steps, giving NFTS' introduction about OSCE (1week-6hr) then Prepare simulated manikin (1-month-30-HR), using high-fidelity manikins. Followed by present a summative checklist used for students' evaluation. (4-month-120-hr) and finally perform posttest.

#### 5. Ethical consideration

Because nursing research interacts with a human subject we will focus in this study on the following ethical consideration, researchers will send a formal letter to UOH to take a permission start doing the intervention. Interventions and data collection won't start until receive permission. Apply beneficence because NFTS have right to protect from Hazard whatever physically, socially or mentally. Participants gave full disclosure and describe benefit and risk of study. Researches will follow respecting all participant dignity to voluntary to participate in study and right to withdrawn or refuse to participate. We will apply implied consent agreement which reflect participant approved to participate by completion lectures, training and complete survey without pressure. The researchers will collect signature of participants in the inform

consent. Researchers focus to provide privacy among Participants and complete survey without mention national number, name or family name of participants. We assure participants that your answers will be confidentially treated and only used for scientific purposes. No vulnerable participant in this research.

**6. Specifying method to measure variable**

Likert scale with 35-items, divided to 4 groups, given to participant to fill from strongly disagree, disagree, neutral, agree and strongly agree. All data collected and convert to nominal, ordinal, interval measurement for SPSS analysis. tools considered own researcher instrument and prepared in English language these tools revised by expert person and fluent person in English to minimize any misunderstanding coming from participants, also reliability and validity of tools was calculated through reliability coefficients for all 35items was found (0.986), reliability of each group in instrument ranged from (0.931-0.972) of each group.

**6.1. Interpret the result**

Researchers start analyzed data using SPSS with frequencies measurements. Total number of participant (n=80), minimal missed value was treated and replaced by SPSS, Likert scale includes four major groups, we had been summarized data by creating a new super variable and merging variable into 4-major groups using computing variable order to estimate median value. GROUP1 (Dose NFTS are Accepting to apply OSCE, this group includes 8-items reliability coefficient (R=0.964). GROUP2 (Dose NFTS participating nursing collage to Develop OSCE, this group includes 5-items (R=0.931). GROUP3 looking to identify opinion of NFTS to dealing with OSCE, this group includes 11-items (R=0.94). GRUOP4 looking to identify perception of NFTS to use and develop OSCE, this group includes 11-items (R=0.972).

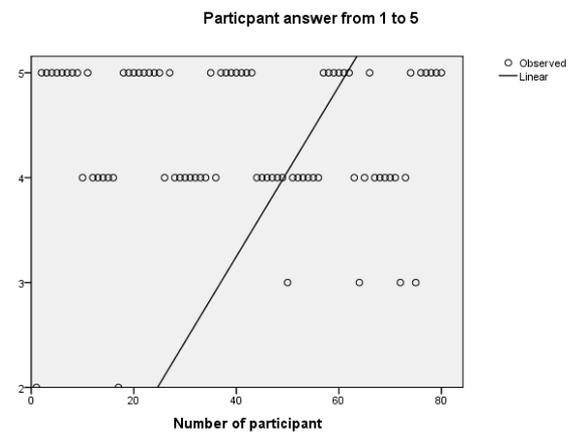
Average age of participant was 33.6(M=2.44, SD=0.793), age of participants ranged from (20-45), Age was non-normally distributed with skewness of -0.024 and kurtosis of 0.404, largest proportion of participants was age group 30-33, Participants were 49male and 31female, average of participants qualification mainly master degree holder (M=2.14, SD=0.545) who actually participate in this study and average experience of participants ranged from 8-12 years (M=2.44, SD= 0.633).

Researchers start answering main researchers' question, by analyze all 35 items to predict "where is the most answers of Likert scale in the whole questionnaires) by using "Regression, Curve Estimation command on SPSS, and select plot model, a significant regression equation was founded and curve model strongly fit (F1, 79=209.391), p<.000, R-square=0.726). Moreover plot model (Fig. 2) reflect most of participants answer between agree and strongly agree (Mean=4.29, median=4), finally There

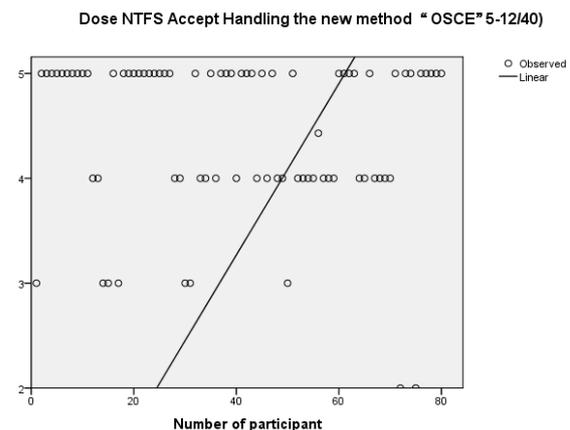
is a significant positive perception among NFTS toward suing OSCE in nursing collage at UOH.

GROUP1: Dose NFTS are accepting to apply OSCE, By analyze (8items) to predict "where is the most answers of Likert scale in this group same regression order was performed based on participants answers. A significant regression equation was founded and curve model strongly fit (F1, 79=201.729), p <.000, R-square=0.719. Moreover curve model (Fig. 3) reflect most of participants answers between agree and strongly agree (Mean=4.43, median=5).

GROUP2: Dose NFTS participating nursing collage to Develop OSCE, by analyze (5items) to predict "where is the most answers of Likert Scale in this group, same Regression command was performed based on participants answers, a significant regression equation was founded and curve model strongly fit (F1, 79=209.209), p<.000, R-square=0.726. Moreover curve model (Fig. 4) reflect most of participant answer between agree and strongly agree (Mean=4.29, median=4).



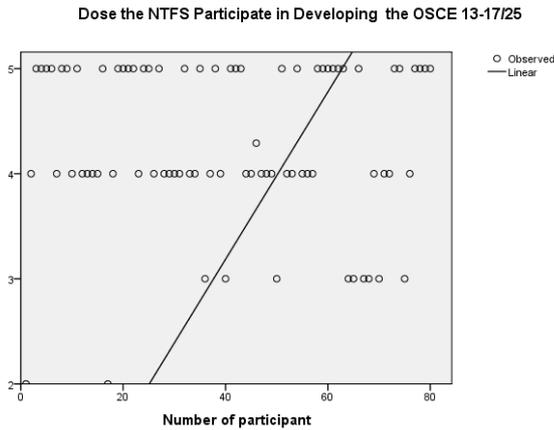
**Fig. 2:** Total participants perceptions toward using (OSCE)



**Fig. 3:** Participants acceptance to apply OSCE

GROUP3: looking to identify opinion of NFTS to dealing with OSCE, analyze (11items) items to predict "where is the most answers of Likert-Scale in this group, same command was performed based on participants answers, a significant regression equation was founded and curve model strongly fit (F1, 79=199.262), p<.000, R-square=0.716. Moreover curve model (Fig. 5) reflect most of

participants answers between agree and strongly agree (Mean=4.11, median=4).



**Fig. 4:** Participants contribute nursing collage to Develop OSCE

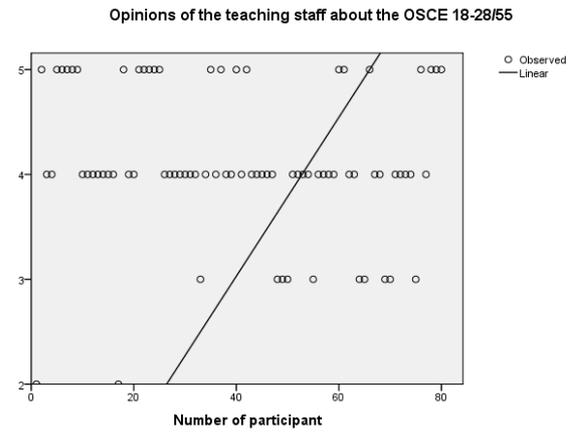
GROUP4: looking to identify perceptions of s NFTS to use and develop new grading system OSCE, analyze (11items) items to predict “where is the most answers of Likert scale in this group same command was performed based on participants answers, a significant regression equation was founded and curve model strongly fit ( $F_{1,79}=200.668$ ),  $p<.000$ ,  $R\text{-square}=0.718$ ).

Moreover curve model (Fig. 6) reflect most of participants answers between agree and strongly agree (Mean=4.35, median=4).

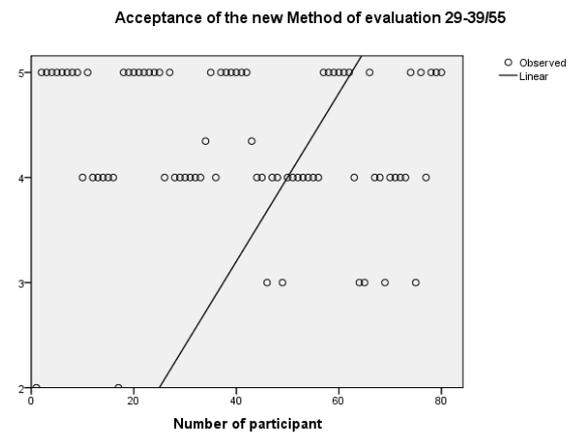
Researchers answering the secondary question by identify the difference of perception among male and female NFTS about using OSCE, T-test analysis was used (Tables 1-2), independent samples T-test conducted, researchers noted that Levine’s Test for Equality of Variances found equal variance assumed  $\text{Sig}>0.05$ ,  $\text{Sig}=0.937$ , we report first line of t-test results, denoted as equal variances assumed, and finally found there is no significant differences between male ( $M=4.39$ ,  $SD=.702$ ) and female ( $M=4.39$ ,  $SD=.715$ ), both male and female had positive perception toward applying and using OSCE,  $t(78)=0.004$ ,  $P=0.997$ . Moreover additional questions, researchers’ answer it in this research “what is the relationship between perceptions of NFTS about using OSCE and NFTS experience? Bivariate Pearson correlation conducted in this study, based on this result there were unidentifiable significant correlation ( $P=0.055$ ,  $P\text{-correlation}=-0.215$ ).

**6.2. Conclusion**

There is a significant positive perception among male and female NFTS toward using OSCE in nursing collage at UOH with total (mean=4.29 over 5) of all 35 items of Likert scale which reflect strong perception. No significant differences between male and female toward these positive perceptions to initiate OSCE.



**Fig. 5:** Opinion of participants to deal with OSCE



**Fig. 6:** Participants awareness to use and develop OSCE

**6.3. Recommendations**

Collage of nursing recommend to apply OSCE, NFTS should become more knowledgeable toward OSCE and cooperate in improving tools of evaluation. Master’s degree in nursing is preferred as a minimum standard for NFTS in teaching Bachelor degree in nursing practice. Establish containing test bank includes different scenarios, questions, answers and updated checklists. Prepare classes for newly NFTS how to use OSCE and frequent refresh old NFTS about using OSCE, workshops for NFTS corporate with other universities, finally notifying the importance of effective planning and collaborative between administration and NFTS to develop OSCE.

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Technology in Jordan for his comments that greatly improved the manuscript. We thank reviewers for their so-called insights.

**Table 1:** Male and female participants differences of awareness toward using OSCE (Group Statistics)

	GENDER	N	Mean	Std. Deviation	Std. Error Mean
Participants answer from 1 to 5	male	49	4.39	.702	.100
	female	31	4.39	.715	.128

**Table 2:** Male and female participants differences of awareness toward using OSCE (Independent Samples Test)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Participants answer from 1 to 5	Equal variances assumed	.006	.937	.004	78	.997	.001	.162	-.322	.324
	Equal variances not assumed			.004	63.034	.997	.001	.163	-.325	.326

## References

- Alsenany S and Al Saif A (2012). Developing skills in managing objective structured clinical examinations (OSCE). *Life Science Journal*, 9(3): 597-602.
- Benner PE (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Addison-Wesley Publishing Company, Nursing Division, Boston, USA.
- Bora S, Heah T, and Thakore S (2005). *OSCEs for medical and surgical finals*. CRC Press, Boca Raton, USA.
- Chabeli MM (2001). Nurse educators' perceptions of OSCE as a clinical evaluation method. *Curatoris*, 24(1): 84-92.
- Courteille O, Bergin R, Courteille O, Bergin R, Stockeld D, Ponzer S, and Fors U (2008). The use of a virtual patient case in an OSCE-based exam—a pilot study. *Medical Teacher*, 30(3): e66-e76.
- Dastjerdie EV, Saboury A, Mahdian M, and Fard MJK (2010). Assessment of Iranian dental lecturers attitude and perspectives toward objective structured clinical examination (OSCE). *Research Journal Biology Science*, 5(3): 241-245.
- Hrachovy J, Clopton N, Baggett K, Garber T, Cantwell J, and Schreiber J (2000). Use of the Blue MACS: Acceptance by clinical instructors and self-reports of adherence. *Physical Therapy*, 80(7): 652-661.
- Ismail LMN, Aboushady RMN, and Eswi A (2015). Clinical instructor's behavior: Nursing student's perception toward effective clinical instructor's characteristics. *Journal of Nursing Education and Practice*, 6(2): 96-105.
- Johnson KV (2016). Improving adjunct nursing instructors' knowledge of student assessment in clinical courses. *Nurse Educator*, 41(2): 108-110.
- Knight AW (2016). A self-determination theory-based analysis of the effects of clinical instructor behavior on student clinical engagement. Ph.D. Dissertation, The University of Iowa, Iowa City, USA.
- Mitchell ML, Henderson A, Groves M, Dalton M, and Nulty D (2009). The objective structured clinical examination (OSCE): Optimising its value in the undergraduate nursing curriculum. *Nurse Education Today*, 29(4): 398-404.
- Morsy N, Othman L, Shalaby M, and Abd Elsalam S (2014). Effect of training by using objective structured clinical examination "osce" on the outcome of clinical training of nursing students enrolled in psychiatric and mental health nursing course. *International Journal of Current Research*, 6(09): 8839-8846.
- Naumann F and Moore K (2012). Developing an objective structured clinical examination to assess clinical competence. In the 2012 Australian Collaborative Education Network National Conference, Deakin University, Geelong, Australia: 223-229.
- Obizoba CO (2014). Exploration of nursing faculty members' lived experiences of objective structured clinical examination (osce) in undergraduate nursing education. Ph.D. Dissertation, Capella University, Minneapolis, Minnesota, USA.
- Omu FE (2016). Attitudes of nursing faculty members and graduates towards the objective structured clinical examination (OSCE). *Open Journal of Nursing*, 6(05): 353-364.
- Parsh B (2009). Nursing student and faculty perceptions of the characteristics of effective instructors in the simulated clinical experience. Ph.D. Dissertation, University of San Francisco, San Francisco, USA.
- Ross M, Carroll G, Knight J, Chamberlain M, Fothergill-Bourbonnais F, and Linton J (1988). Using the OSCE to measure clinical skills performance in nursing. *Journal of Advanced Nursing*, 13(1): 45-56.
- Sukhato K, Sumrithe S, Wongrathanandha C, Hathirat S, Leelapattana W, and Dellow A (2016). To be or not to be a facilitator of reflective learning for medical students? a case study of medical teachers' perceptions of introducing a reflective writing exercise to an undergraduate curriculum. *BMC Medical Education*, 16(1): 102-111.