

**NURSING STUDENT'S PERCEPTIONS OF AN OBJECTIVE  
STRUCTURED CLINICAL EXAMINATION (OSCE) IN DIPLOMA OF  
NURSING AT TRAINING INSTITUTION, MINISTRY OF HEALTH,  
MALAYSIA (TIMOHM), JOHOR BAHRU**



- **Dawindar Kaur**
- Acting Director  
(Nursing Lecturer  
Grade U48)
- Training Institution,  
Ministry of  
Health Malaysia,  
Johor Bahru

# ORAL PRESENTATION

## **23<sup>rd</sup> JOINT MALAYSIA-SINGAPORE NURSING CONFERENCE 2018**

Equatorial Hotel, Malacca  
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# OUTLINE OF PRESENTATION

1. Title
2. Background
3. Methods
4. Results
5. Discussion
6. Acknowledgments
7. References / Bibliography

# 1. STUDY TITLE

Nursing Students' Perceptions of an Objective Structured Clinical Examination (OSCE) at Training Institution, Ministry of Health, Malaysia (TIMOHM), Johor Bahru.

Dawindar Kaur

Master of Nursing : 2018

MAHSA University, Saujana Putra, Malaysia

Present work place : Training Institution,  
Ministry of Health Malaysia,  
Johor Bahru

# 2. Background

## Significance of study

Students' performance in OSCE is crucial as it provides a platform for students to demonstrate skills for assessment in readiness to deliver excellent nursing care.

Previous studies conducted overseas (Al-Zeftawy & Khaton, 2016, Muldoon, Martensson and Lofmark, 2013, Delavar et.al, 2013 and AbdAlla and Mohammed, 2013).

Limited studies conducted in Malaysia (published).

Important to consider local students' perceptions when designing OSCE as an assessment tool (Johnston et.al, 2017).

## 2. Background – cont.

### Relevance to health

#### OSCE

- allows students to demonstrate skills
- gives opportunities for students to improve clinical skills
- fundamental importance in determining students' competency in readiness to provide nursing care and improve patients' health.

OSCE - Examiners can identify where students are deficient and take remedial actions to hasten students' learning process.

Students' perceptions of OSCE provides important information for improvement of OSCE process, thereby helps improves students' skills in delivering nursing care to patients.



## 2. Background – cont.

### Study objectives

- i. To assess student nurses' stress level related to OSCE.
- ii. To evaluate student nurses' perceptions of the OSCE.
- iii. To compare the student nurses' stress level with the selected demographic and academic variables (gender, age, semester, previous semester Grade Point Average (GPA), previous semester clinical assessment score and previous education qualification).
- iv. To determine the association of student nurses' perceptions of OSCE with the selected demographic and academic variables.
- v. To identify student nurses' views of the OSCE.

# 3. Methods

## Study design

- Quantitative, cross-sectional descriptive survey.
- Modified questionnaire (39 items):-
  - Sosio-demographic & academic data - 6 items
  - Dass-21 inventory – assess stress level – 7 items
  - Perceptions on OSCE (Likert scale & open-ended items) – 26 items

**Ethical approval** from relevant authorities

**Pilot study** - Overall Cronbach Alpha = **0.862**



# 3. Methods – cont.

## Population

252 Nursing students undergoing training in TIMOHM JB from semester 2 – 6.

## Sampling

Non-probability convenient sampling method : all nursing students from semester 2 to 6, who had experienced OSCE at least twice (inclusion criteria).

Exclusion criteria – students who refused informed consent

# 3. Methods – cont.

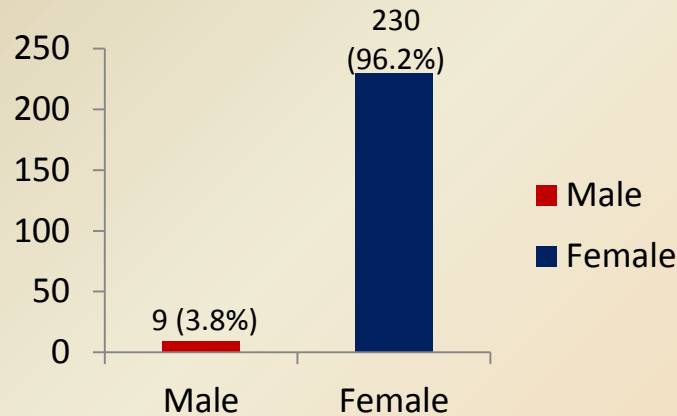
## Analysis method

	Objective	Data analysis method
i	To assess student nurses' stress level related to OSCE.	Descriptive analysis - low, medium and high stress level
ii	To evaluate student nurses' perceptions of the OSCE.	Descriptive analysis - mean - SD - 5 point Likert scale analysis
iii	To compare the student nurses' stress level with the selected demographic and academic variables	Independent T-test to compare between students' gender with stress level
		One way ANOVA to compare students' stress level with all the other variables
iv	To determine the association of student nurses' perceptions of OSCE with the selected demographic and academic variables	Independent T-test to determine the association between students' gender and their perceptions of OSCE
		One way ANOVA to determine the association between students' perceptions of OSCE with all the other variables
v	To identify student nurses' views of the OSCE	Qualitative data analysis of 3 open-ended questions

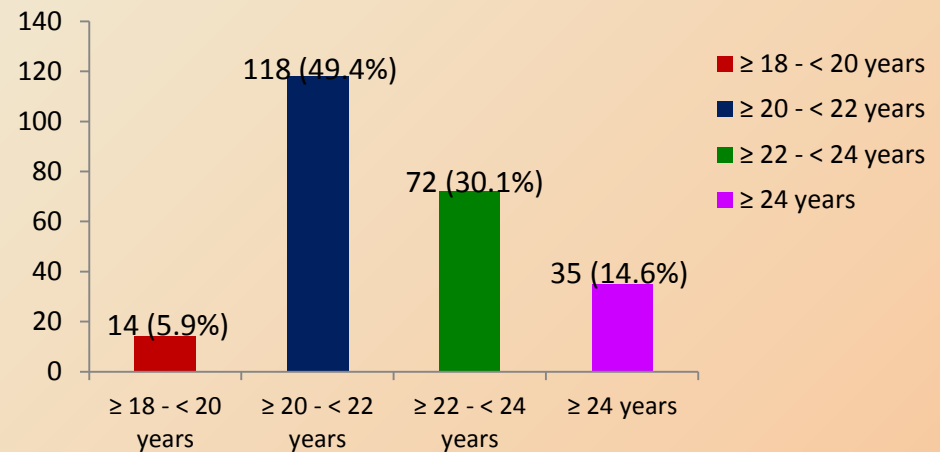
# 4. Results

## Demographic and academic information of students

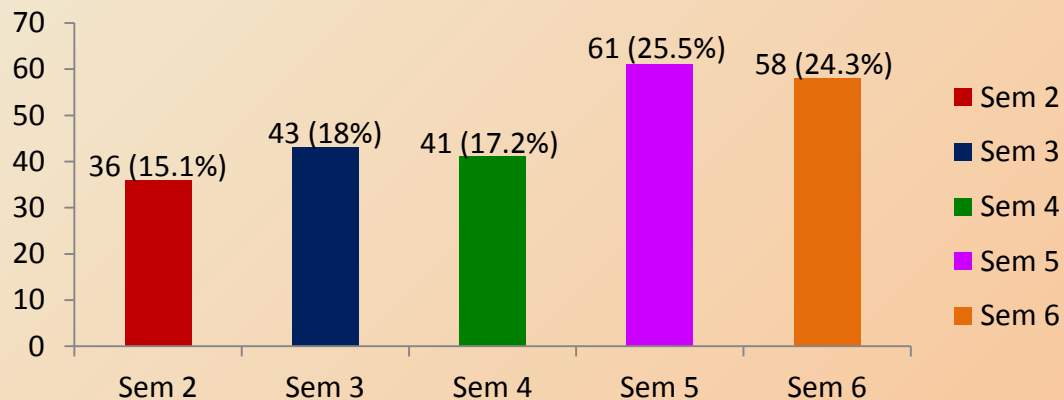
### STUDENT NURSES' GENDER



### STUDENT NURSES' AGE

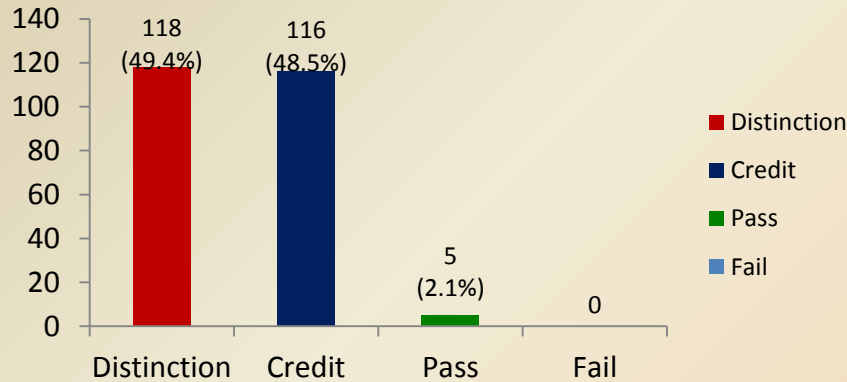


### STUDENT NURSES' SEMESTER

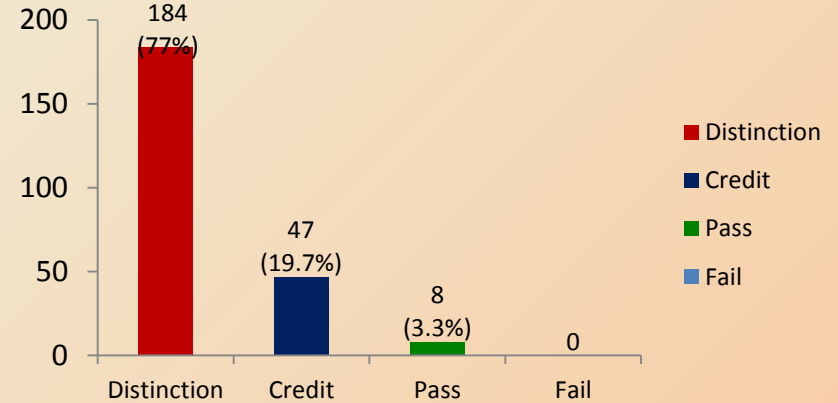


# 4. Results – cont.

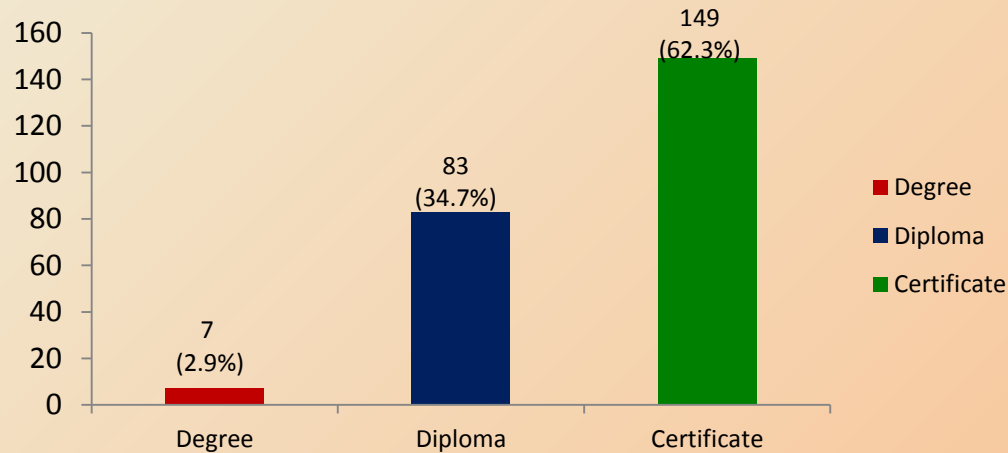
### PREVIOUS SEMESTER GPA



### PREVIOUS SEMESTER CLINICAL ASSESSMENT SCORE



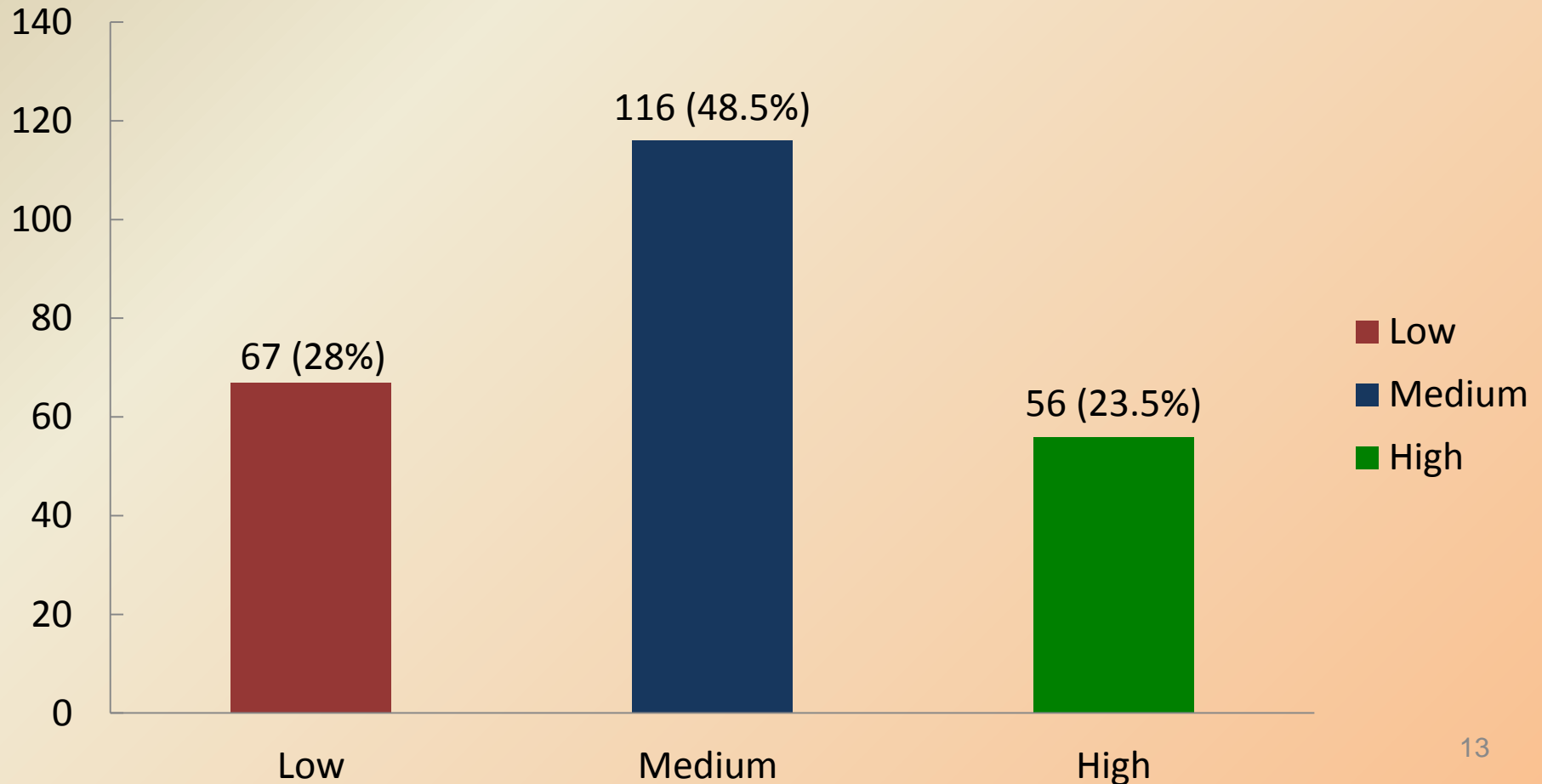
### PREVIOUS EDUCATION QUALIFICATION



## 4. Results – cont.

**Objective 1: To assess student nurses' stress level related to OSCE.**

**STUDENT NURSES' STRESS LEVEL RELATED TO OSCE**



## 4. Results – cont.

**Objective 2: To evaluate student nurses' perceptions of OSCE.**

<b>Dimensions</b>	<b>Mean</b>	<b>SD</b>
Preparation for OSCE	3.92	0.51
OSCE evaluation	<b>4.13 **</b>	0.49
Quality of performance testing	<b>3.74 *</b>	0.42
Validity and reliability	4.09	0.53
<b>Overall</b>	<b>3.98</b>	<b>0.37</b>



## 4. Results – cont.

**Objective 3: To compare the student nurses' stress level with the selected demographic and academic variables.**

	<b>T-test</b>	<b>One way ANNOVA</b>				
	<b>Gender</b>	<b>Age</b>	<b>Sem.</b>	<b>Previous GPA</b>	<b>Previous C.A. score</b>	<b>Previous edu. qua.</b>
<b>p value</b>	0.083	0.527	0.276	0.199	<b>0.030 *</b>	0.233

## 4. Results – cont.

**Objective 4: To determine the association of student nurses' perceptions of OSCE with the selected demographic and academic variables.**

**p value**

	<b>T-test</b>	<b>One way ANNOVA</b>				
	<b>Gender</b>	<b>Age</b>	<b>Sem.</b>	<b>Previous GPA</b>	<b>Previous C.A. score</b>	<b>Previous edu. qua.</b>
<b>Preparation process</b>	0.183	0.100	<b>0.000*</b>	0.794	0.706	<b>0.015*</b>
<b>OSCE evaluation</b>	0.119	0.228	<b>0.000*</b>	0.376	0.350	0.542
<b>Quality of performance testing</b>	0.788	0.708	<b>0.000*</b>	0.433	0.705	0.558
<b>Validity and reliability</b>	0.502	0.922	<b>0.000*</b>	0.456	0.635	0.308

## 4. Results – cont.

**Objective 5. To identify student nurses' views of the OSCE.**

<b>POSITIVE COMMENTS</b>	<b>No. of comments</b>
Improves/measures nursing skills & knowledge	172
Increase confidence & self-esteem	55
Identifies weakness	27

<b>NEGATIVE COMMENTS</b>	<b>No. of comments</b>
Inadequate time in each station	165
Stressful experience	135
OSCE twice a semester too frequent	92
Nervous	55
Waiting time – too long, boring, tired (students in the last circuit)	52

## 4. Results – cont.

**Objective 5. To identify student nurses' views of the OSCE.**

<b>SUGGESTIONS FOR IMPROVEMENT</b>	<b>No. of comments</b>
<b>i. Equipments</b>	
Complete, well arrange & functioning equipments and manikins	36
<b>ii. Examiners</b>	
Examiner not to disturb students when performing procedure	16
Examiners should be friendly	14
<b>iii. OSCE process</b>	
Allocate more time per station	53
Allow time for practice before OSCE	23
Clear & short instructions	22
Conduct OSCE once a semester	20
Run more parrarel OSCE stations	20



# 5. Discussion

## Interpretation of findings

- Three quarter (72%) students were **stressed**.
- Half (51.1%) students agreed to statement 'OSCE is stressful in general.

Congruent to (Khan, Ayub and Shah, 2016 and Delavar, 2013).

Chongloi et.al (2016) - even the 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate nursing students found OSCE stressful.

- Statistical difference ( **$p=0.030$** ) between students' stress level and previous semester C.A. score.

Congruent with Bayoumy and Yousri (2012) - good previous performance → less stress; poor performance → increase stress

# 5. Discussion – cont.

## Interpretation of findings – cont.

- Association (**p = 0.000**) : students' perceptions of OSCE and their semester level - better perceptions as semester increases.

More exposure to OSCE, increases confidence → better performance and perceptions (Shahzad, Saeed and Paiker, 2017 and Small et.al, 2013).

- Association (**p = 0.015**) : students' perception of OSCE preparation and their previous education qualification - diploma or degree qualification → better perceptions than students with a certificate qualification.

Exposure during previous courses influence their perceptions. However, this aspect is not identifiable in the literature.



# 5. Discussion

## Interpretation of findings – cont.

- Open ended questions – OSCE helps improve skills & knowledge → increase confidence & self esteem.

Congruent with Shahzad, Saeed and Paiker, 2017 and Awad et.al 2017) hence provide quality nursing care (Opoka et.al, 2015).

- Students revealed inadequate time to perform procedures and a stressful experience during OSCE.

Congruent with El-Nasser-Ali, Mehdi and Ali (2012).

# 5. Discussion – cont.

## Limitations

- Perceptions of OSCE examiners not studied.

Comparison of examiners and students would be beneficial.

- Students from other Programs or Training Institutions were not included in this study.

Comparison between two or more programs or institutions would be valuable.

# 5. Discussion – cont.

## Recommendations : Students' suggestions

- Reduce stress during OSCE.
- Increase timing for each station.
- Allocate reading time of instructions.
- Guidance in interpretation of instructions.

## Recommendations : Future studies

- Compare perceptions of students with their grades.
- Study perceptions of students undergoing OSCE for the first time in semester 1.
- Study and compare the perceptions of students from the other Diploma Programs and other Training Institutions.

# 5. Discussion – cont.

## Conclusion

Although OSCE was highly appreciated by students, they experienced stress and recommended to increase time spent in each station and guidance in interpretation of instructions.

OSCE provides excellent opportunities for students to apply theory to practice, hence allows corroboration of academic component to practice, thereby increases students' confidence in delivering excellent nursing care.

# 6. Acknowledgment

## Sincere appreciation to:

1. Assoc. Prof. Zahrah Saat (MAHSA University).
2. Dr Syed Ali Gulab Jan – Supervisor (MAHSA University).
3. Former Director and staff of TIMOHM Johor Bahru.
4. Nursing students who participated in this study.
5. My late mother, my husband, children, sisters and relatives.



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