

“Objective Structured Clinical Examination(OSCE) Nursing Teacher And Students Perception: A systemic Review ”

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Abstract

Introduction: An Objective Structured Clinical Examination (OSCE) is a type of examination often used in health sciences is often used in undergraduate nursing education as a means to provide standardised and objective evaluation of clinical skills required for nurses. OSCE help the student to better learning and master in clinical skill development. OSCE is a safe and effective teaching method to teach students clinical skill in a controlled environment under the supervision of teacher. OSCE is first introducing in 1970 to assess the skills of medical students. Since then it is continuously used especially in nursing students.

Aim: The purpose of the paper is providing evidence regarding academic benefits of OSCE in undergraduate nursing students. The aim of this paper is analysing the finding of nursing educators and nursing students perception towards OSCE.

Methods: A systematic review of articles published regarding OSCE in nursing education, students and educators view towards OSCE. Articles were carried out in the period between 2010 and 2021.

MEDLINE, regarding the use of OSCE in nursing education, and students' and educators' perception of the OSCE examination, was carried out in the period between 2005 and 2017.

Results. In total, 8 articles were taken into consideration. These studies were selected because they provided information on the use of OSCE in nursing

Conclusion. The application of OSCE has multiple benefits for nursing students. It can easily assess the knowledge and performance of clinical skills important for nursing practice. It serves to better prepare students for their professional activity.

Key Word; OSCE, undergraduate students, skill, Perception

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I. Introduction:

An Objective structured clinical Examination (OSCE) is a type of examination often used in health sciences. It is designed to test clinical skill performance and competence in a range of skills. It is a practical, real-world approach to learning and assessment. The OSCE content and scoring procedures are standardized. Each examination station is designed to focus on an area of clinical competence. A standardized scoring tool is used to record what you do or do not do well.¹

The objective structured clinical examination (OSCE), first used in the 1970s, is an assessment of competence carried out in a well-planned, structured and objective way.² It is well established within medicine and is used increasingly in nurse education.³ An OSCE can consist of one station where students perform one or a variety of skills and are tested on the underpinning clinical and theoretical knowledge, or multiple stations, each testing a different skill or piece of underpinning knowledge.⁴

During OSCE an assessor is present to mark student's skill while they present in each station. for example if the student is performing vital sign procedure or aseptic dressing change the assessor is there to mark their skills on a checklist. Theoretical knowledge can be assess on paper based questions or Multiple choice questions, whereas clinical skill can only be assess through performance. OSCE doesn't involve patient and so it is safe and very effective way to assess.

OSCE is well known examination tool especially skill based field like Nursing. It is widely used but not as a mandatory examinations tool. The main aim of this reviewed paper is to encourage the nursing educators for make OSCE a frequently used tool for better skill development of nursing student.

AIM

- The purpose of the paper is providing evidence regarding academic benefits of OSCE in undergraduate nursing students.
- The aim of this paper is analysing the finding of nursing educators and nursing students perception towards OSCE.

PROCESS OF OSCE

According to Alinier 2003, OSCE need 15-20 exercise station where students rotate and perform the procedure given in the station individually. The number of students is determining by the number of station. Approx time for one station is about 3-10 minutes, and can be alternate with short rotation interval. It is important that student must be preparing before conducting OSCE. Student must be prepared with procedures, purpose, instruments etc. After that the student gets clear instruction about the task that need to be done, during OSCE, educators evaluate students approach to the patient their communication skills, the interaction between the student and the student and the simulated patient. Each student performs the task and evaluated by evaluator by a check list or pre set criteria thereby making the examination structured and objective. The mentor monitors student's performance and provide them feedback about their success in performing those skill, also inform them regarding their mistakes and cause of those mistakes. It provides the students a clear picture of their performance in terms of their weak and strong points. OSCE provide an active learning controlled environment.⁵

ADVANTAGE & DISADVANTAGE OF OSCE

Advantage: It is an interesting teaching method which encourages students towards active learning. It increases logical and critical thinking rather than passive learning. It ensures a safe controlled environment without compromising patient's safety. Students learn about tools and also develop confidence. It increase students knowledge and learning in more practical way.

Disadvantage: It is costly in terms of resources, article for procedure stations, and time consuming. It requires a lot of preparation and organization of exam. It create competitive atmosphere and some students finds it stressful.

II. Methodology

The present study is a systematic review of published articles regarding use of OSCE in nursing students India. It includes both the students and educators perception on OSCE as examination and learning tool.

Inclusive Criteria

- Original article/ study related to Indian setting only.
- It includes students and educators perception.
- Article published in English language only.
- Article include publication year between 2010-2021.

Exclusive Criteria

- Article / Study other than India related to OSCE.
- Article Published before 2010.

III. Result

The search for systemic review identify 34 studies, indicated nursing students perceptions towards OSCE, Nursing educators perception towards OSCE or some studies indicated both (student and Educators) perception. A total of 8 studies were selected out of which 4 indicated each (Student & Educators). As per inclusive criteria all studies are from India only.

All studies provide all necessary description related to usefulness of OSCE in nursing education. It also provides detail information regarding station timing of OSCE.

STUDENTS PERCEPTION REVIEW

Lawrence S & Selvan A. (2019)The study was conducted in RKDF College of Nursing, Bhopal in the department of obstetrics and gynaecology. The study being a retrospective case series design for the assessment of perception of sample regarding OSCE. The overall study population included 80B.Sc. Nursing IV Year students. This study interpreted on the feedback given by the students on evaluation of the quality of performance in OSCE. Study reveals that approx 72.5% students were agree that OSCE was fair testing knowledge and skill. 76.25% students stated that OSCE is not affected by personality and social relation of student. The overall perception of nursing students towards OSCE reveals that mostly 75% students agreed for OSCE as positive attribute.⁶

Maurya A.(2015) conducted a descriptive study at SRMMCON Sawangi Meghe Wardha, among 74 undergraduate Nursing Students. Result reveals that mostly 69% of nursing students perception were agree about OSCE validity and reliability, 29% had Strongly agree and almost negligible 1.35% has neutral perception towards OSCE validity and reliability. The maximum perception score attained was 64 whereas minimum was 42.⁷

Sundarsan D (2020) conducted study among 150 B.Sc. Nursing students respectively 1st, 2nd and 3rd year. The aim of study to assess the attitude of nursing students towards OSCE. The result of study was showed that 118 (85.51%) of nursing students had favourable attitude and 19 (13.77%) had moderately favourable attitude toward OSCE. Mean attitude score of nursing students toward OSCE was 85.71 with standard deviation of 8.50.⁸

Dr.Vijaylaxmi K & Dr.Revati S. (2017) conducted study among 84 undergraduate nursing students. Study findings revealed that, students’ performance scores were higher in OSCE while comparing to TPE within and between the groups (P<0.001) Hence it is recommended that, OSCE can be effectively used as a part of formative and summative evaluation in Psychiatric Nursing.⁹

Table 1 : Nursing Students Perception Towards OSCE

Authors	Year of Publication	No.Of Respondent	Clinical Station	Duration	Conclusion
Dr.Lawrence S.& Dr.Selvan A.	2019	80	5	5min	Nursing students found OSCE had helped to ensure a valid representation
Maurya A	2015	74	5	10-15 min	The nursing students were “strongly Agree”& “Agree” about perception OSCE
Dr.Vijaylaxmi K.	2017	84	17	6min	OSCE can be used as a supplementary method of evaluation to improve reliability & validity
Sudarshan D.	2020	150	6	7min	OSCE was found effective and develop positive attitude among nursing student.

EDUCATORS PERCEPTION REVIEW

Prof. G. Muthamilselvi (2013) conducted study among 30 nursing faculty of Vinayaka Mission’s College of Nursing, Pudhucherry to assess the attitude towards OSCE a 15 items five point Likert scale was used. Unstructured Questionnaire was formulated to explore an opinion. Study findings shows that the Nursing Faculty 73% of them have positive attitude and 27% of them have negative attitude towards OSCE. Opinion on OSCE was explored and grouped under “Opinion on OSCE”.¹⁰

Girija B.S.(2018) conducted study among faculty and students. Result reveals that faculty and students favoured OSCE as an assessment tool and strongly perceived that OSCE could be implemented for better evaluation.¹¹

Shweta Kshirsagar et.al. (2018). Study conducted among nursing faculty and nursing students for perception towards effectiveness of OSCE. Result reveals that 100% of them felt OSCE helped in timely completion of task, ensured objectivity in evaluation, appropriate feedback provided better than routine clinical evaluation and can be implemented on every procedure.75.1% agreed for OSCE as systematic way for conduction of practical examination and 25% disagreed it.50% felt that students exhibited improved confidence level during OSCE and 50% disagreed with this statement.¹²

Pramila R (2017), conducted study among 31 nursing faculty of Chirayu Nursing College Bhopal to assess the effectiveness of OSCE. The results of the study reveal that majority (51.6%) had average knowledge and 38.7% had poor knowledge in the pre test whereas majority (90.3%) had good knowledge and 9.7 % had average knowledge in post test.¹³

Table 2 : Nursing Educators Perception Towards OSCE

Authors	Year of Publication	No. Of Respondent	Perception	Conclusion
Prof.G.Muthailsevi	2013	30	Nursing Faculty attitude towards OSCE found 96% very high.	Faculty having high attitude towards OSCE
Girija B.S.	2018	10	There is a significant difference between pre and post test attitude score.	Nursing faculty favoured OSCE as an effective assessment tool.
Kshirsagar S.et.al.	2018	4	All the nursing faculty felt OSCE helped in timely completing the task.	Supervisors were very comfortable & friendly with OSCE station. It is found more accurately

				timely & not biased.
Pramila R.	2017	31	Aspect of OSCE; <ul style="list-style-type: none"> • Tool of evaluation • Clinical competence • Planning of OSCE • Method of conducting • Scoring 	OSCE among nursing educators in pre test was low. Nurse educators need to improve and strengthen towards clinical skills.

IV. Recommendation

- Similar study can be review worldwide.
- Comparative studies can be conducted among nursing students and educators.
- Similar study can be reviewed on large no of studies.

V. Conclusion

In the present scenario of health care system it is very essential to provide skilled nurses without harming patient right or security. OSCE is one of the best way to achieve this part for nursing students. This study emphasizes the importance of OSCE application in nursing education. OSCE includes multiple benefits for nursing students, nursing educators and patients care. The present systemic review is to help nursing students and educators for enhance better learning environment.

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