

IMPACT OF OSCE IN NURSING EDUCATION – A SYSTEMATIC REVIEW

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ABSTRACT

A systematic review was conducted to assess the impact of OSCE in nursing education. The aim of this review was evaluated the impact of implementation of objective structured clinical examination (OSCE) in nursing education by examining published systematic reviews and metaanalyses and provided recommendations for future research and interventions. The study was selected from PubMed, Google Scholar and CINAHL data base. Around 16040 studies were founded. The study was collected on the basis of inclusion and exclusion criteria. Inclusion criteria are (1) study conducted in between 2010 to 2023 and reviewed intervention studies on impact of OSCE in nursing education (2) were a systematic review and/or a meta-analysis (3) study included, those who tested the impact and provide the solution. (4) Provided quantitative results examining the effectiveness of the intervention. Exclusion criteria are (1) Did not target the impact of OSCE in nursing education (2) Study were conducted before 2010(3) did not report quantitative outcomes of OSCE intervention effects in nursing education. Total 20 studies are included. In total 15 original studies and other fives are reviews. The result of this review shows that, OSCE was widely accepted in nursing schools. This helped the students to manage complex scenarios. It enhances the skill, knowledge of nursing students and faculties. Conclusion, it is more effective than traditional methods.

Keywords: IMPACT, OSCE, NURSING EDUCATION, SYSTEMATIC REVIEW, META-ANALYSIS



INTRODUCTION

Objective structured clinical examination (OSCE) is an approach to the assessment of clinical experience in which the components of clinical competence in which the components of competence are assessed in a planned or structured way with attention being paid to the objectivity of the examination. Students were assessed at a series of stations with one or two aspects of competences.1

OSCE has been implemented from 2022 in B Sc nursing curriculum in India. Objective structured clinical examination (OSCE) has been used to assess medical students since the mid-1970s, and in more recent years has been increasingly utilised to assess students from nursing and the allied health professions. This growing utilisation has led to considerable debate within the literature pertaining to the optimal use of OSCE as an assessment process. This study focus is to present a narrative review regarding some of the key issues affecting the utilisation of OSCE within the assessment of nursing students. The paper briefly reviews the historical development of OSCE within health professional assessment, and summarises some of its key strengths and limitations. It then offers a more 'in depth' consideration of the research literature pertaining to the reliability and validity of the OSCE process, which is then used as a basis for exploring some of the particular issues that need to be considered when OSCE is used to assess nursing students. Key issues identified include the need to carefully prepare and pilot new OSCE examinations and marking tools in order to ensure reliability and validity is optimised, and also the need to carefully consider the length, number and interdependence of OSCE stations to ensure that the potentially competing requirements of validity and reliability are balanced. The paper also recognises that whilst the evidence base regarding OSCE is extensive, the evidence base specific to nursing is more limited. There is therefore scope for further research in this area, as well as the need for careful debate regarding how national guidance may be a way of enhancing and standardising future OSCE examinations. The paper concludes that whilst caution must be applied in relying on OSCE as a sole means of practitioner assessment, used carefully it can make a helpful and meaningful contribution to health professional education.2As per my opinion, teachers need training about OSCE and how to make stations and their importance. Here, we can see that Indian nursing council blindly implemented the OSCE curriculum in BSc Nursing course. More careful planning and training is required.

STATEMENT OF THE STUDY

Impact of OSCE in nursing education-systematic review

OBJECTIVE OF THE STUDY

This study evaluated the impact of implementation of objective structured clinical examination (OSCE)in nursing education by examining published systematic reviews and meta-analyses and provided recommendations for future research and interventions.

MATERIALS AND METHODS **STUDY SELECTION** DATABASE AND LITERATURE SEARCH STRATEGY

We searched the PubMed, Google scholar and CINAHL databases to identify systematic



reviews and meta-analyses published in English between January 1, 2010, and January 2023, that evaluated the impact of OSCE in nursing education. For the search, combinations of key terms were used in the PubMed, for example, "OSCE[Title/Abstract] and Search results were further screened manually by study title, abstract, and full text on the basis of inclusion and exclusion criteria. The initial search yielded 16025 articles. After eliminating duplicates and studies that did not fit the inclusion criteria, 20 reviews meeting the inclusion criteria remained; 14 were original research 05 were meta-analyses 1 is randomized controlled trials (RCTs; Figure 1).

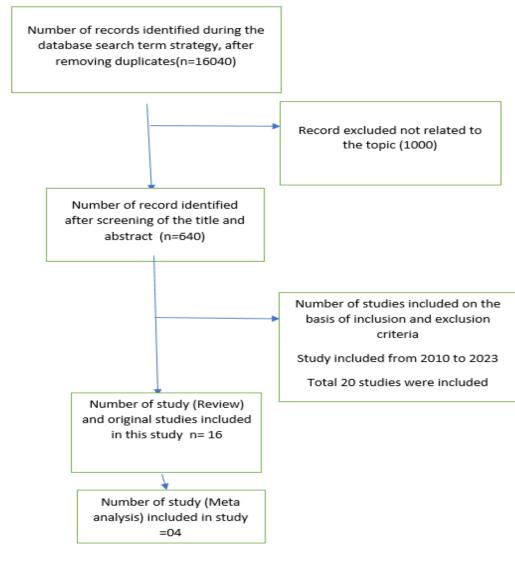


Figure.1



STUDY INCLUSION CRITERIA

Studies were included

(1) Study conducted in between 2010 to 2023 and reviewed intervention studies on impact of OSCE in nursing education

- (2) Were a systematic review and/or a meta-analysis
- (3) Study included, those who tested the impact and provide the solution.
- (4) Provided quantitative results examining the effectiveness of the intervention

STUDY EXCLUSION CRITERIA

Studies were excluded

- (1) Did not target the impact of OSCE in nursing education
- (2) Study were conducted before 2010
- (3) did not report quantitative outcomes of OSCE intervention effects in nursing education.

STUDY OUALITY ASSESSMENT

We used the Assessment of Multiple Systematic Reviews (AMSTAR 2) to assess the quality of selected studies by 16 criteria (eg, study selection, data extraction, assessing risk of bias, study description, and statistical methods) according to the study characteristics. We assigned 1 point to each item that scored *yes* and summed these to calculate a total score (ranging from 0 to 16) for each review. We classified the quality of systematic reviews as high (score range 12-16), moderate (score range 9-11), low (score range 5-8), or critically low (score range 0-4)

DATA EXTRACTION AND STATISTICAL ANALYSIS

Data were reviewed and extracted by 2 co-authors following the Preferred Reporting Items for Systematic Review and Meta-Analysis guidelines [42]. The information extracted included study year; design; objective; literature search scope and date; the number of articles accessed and included in the systematic review; and nature of the intervention, such as application type and targeted function, outcome measures related to impact of OSCE. Using mixed effect models, we conducted a meta-analysis to evaluate the overall effectiveness of OSCE on the basis of other published meta-analysis results with RCTs.

REVIEW OF LITERATURE

Many studies were conducted in national and international level regarding the importance of OSCE in nursing education. Most of studies were pointed out that usefulness and acceptance of the OSCE.A qualitative study conducted in Catalonia (Spain) for 10 years. To explore the usefulness and acceptance attributed by students and faculty members to an objective structured clinical evaluation. Seventy undergraduate nursing students and 12 faculty members were participated in this study. They were used open -ended questionnaire, a student-focus interview and individual faculty interviews. The results show that, students were accepted this strategy and it improved their clinical competencies and made them confident to face clinical challenges. Faculties accepted the values and importance in nursing education. Therefore, they were recommended to reimplement the OSCE in revised syllabus of B.Sc. Nursing in in European Universities.³



A systematic review conducted to evaluate the simulation using objective structured clinical examination (OSCE) among undergraduate nursing students in Africa, this study focused that to compare and contrast OSCE use across countries as a simulation assessment tool in corporating perspectives of nursing students. The method was used for systematic literature was conducted utilizing Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The databases that were featured are EBSCO, Google Scholar, ScienceDirect, and PubMed from 2017 to 2022. The Mixed Method Assessment Tool (MMAT) was used to assess the quality of the studies. The National Health and Medical Research Council's standards were also used to evaluate quantitative studies. **Results**, There were 182 articles found in a literature search. A total of 18 articles met the inclusion criteria. Students reported that the OSCA is wellstructured, sequential, and covers a wide range of knowledge and skills. Despite the fact that it is stressful, expensive, and requires more time for preparation and implantation, many still prefer it because of its benefits. This review can conclude that students exhibited favourable perspectives toward using OSCE, contributing to the development of clinical skills, and increasing self-confidence in their knowledge. Conducting more research related to the comparison of OSCE to clinical practice scores outcomes is advised and strategies for lowering stress and cost exam are recommended.⁴

Psychometric testing and cost of a five-station OSCE for newly graduated nurses. The Objective Structured Clinical Examination (OSCE) is widely used in nursing education, but its implementation is costly and resource intensive, potentially limiting its feasibility. A five-station OSCE was designed to replace a previously validated 12-station OSCE but was not evaluated for its psychometric properties. This study aimed to evaluate the validity, reliability, acceptability, educational impact, and cost of a five-station OSCE using Van der Vleuten's utility formula. This study was based on a cross-sectional, nonexperimental design involving psychometric testing, a survey, and a cost analysis. The five-station OSCE showed high content and predictive validity and inter-rater reliability among examiners. The OSCE format was well accepted by participants and achieved a cost saving of 45.2% compared with the 12-station format. Study concluded that, the five-station OSCE provides an authentic and objective assessment of competence among newly graduated nurses.⁵

Midwifery students' experiences of objective structured clinical examinations: A qualitative evidence synthesis. To identify and synthesise the evidence of midwifery students' views and experiences of Objective Structured Clinical Examinations (OSCEs). A qualitative evidence synthesis was undertaken using Thomas and Harden's synthesis methods and reported according to the ENTEREQ guidelines. PubMED, CINAHL Plus, Embase, ERIC, PsycINFO, Social Science Citation Index (via Web of Science) and Scopus were searched from inception to 19th February 2020 and an updated search was performed on 12th May 2021 to identify qualitative and mixed method studies, reporting qualitative data of undergraduate midwifery students' views and experiences of OSCEs. Studies were independently screened by title and abstract according to a predetermined inclusion and exclusion criteria. Full text review was then conducted independently by two authors. Studies providing qualitative data on undergraduate midwifery students' views and experiences of OSCEs during their midwifery registration



education programmes were included. Quality appraisal was performed using the Critical Appraisal Skills Programme (CASP) tool. Data synthesis was performed using Thomas and Harden's thematic synthesis method. Eleven studies were identified and included. Thematic synthesis identified 13 descriptive themes which translated into four analytical themes that represented midwifery students' views and experiences of OSCEs: the preparation phase, the assessment phase, the feedback phase and the translation phase. This synthesis offers insight into undergraduate midwifery students' views and experiences of OSCEs and how they are experienced across four phases. This is determined to be a useful structure to guide midwifery educators and researchers in their consideration of the student experience of OSCEs in the future. Midwifery students in this synthesis reported high levels of nervousness, anxiety, and stress during the OSCE process. The findings reveal that there are a number of controllable factors impacting on midwifery students' feelings of safety in the assessment environment, and that these should be addressed to maximise the advantages that the OSCE has to offer in terms of learning and preparation for clinical practice.⁶

Objective structured clinical examination vs traditional clinical examination to evaluate students' clinical competence: A systematic review of nursing faculty and students' perceptions and experiences. A systematic review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendations. Electronic databases including Scopus, Medline, Science Direct, CINAHL, EBSCO, PsychINFO, and Pubmed Central were used to identify relevant articles. The studies published between January 1, 2010 and December 31, 2020 and fourteen full-text articles that met all the inclusion criteria were included in the review. The review identified five themes namely: a) Student's perception of OSCE; b) student's satisfaction regarding OSCE as an examination approach; c) students' perception of TCE as an examination approach; d) student's level of stress and anxiety towards OSCE vs TCE; and e) faculty member's perception and experience of OSCE. In this study conclude that OSCE is a more credible assessment format to evaluate the clinical competence of undergraduate nursing students compared to the TCE method.⁷

An integrative review was conducted to assess the use and effect of OSCES in post-registration nurses. The purpose of this review was to critically analyse studies using OSCEs in postregistration nursing. Education and to explore the use and effectiveness of OSCEs in this cohort. His review was conducted using the Whittemore and Knafl's framework for integrated reviews. Using the search terms OSCE OR OSCA OR objective structured clinical examination AND nursing NOT undergraduate, a comprehensive review was conducted using CINHAL and MEDLINE. The initial search located 173 studies. After screening and checking eligibility 19 studies were critically appraised. The final number of studies included in this review was 16. Three themes were generated: (i) Application of OSCEs in post-registration level nursing (ii) OSCEs more than an exam: Learning enhancements and (iii) Participant perceived impact of OSCEs. OSCEs for post-registration nurses have evolved from the original OSCE design and have been adapted to a wide range of clinical settings and specialities. OSCEs were recognized as a valuable learning and assessment tool across the world for post-registration nurses. OSCEs offered strengths in terms of learner satisfaction and increased self-efficacy for this cohort.



There was limited evidence supporting the effects of OSCEs within post-registration nursing education in comparison with other educational tools. Further research is needed to explore whether the knowledge gained in OSCEs is translated into clinical practice and whether simulation-based education is more effective in achieving enhanced knowledge compared to traditional-based education. Future research is required using RCT methods to compare the impact of OSCE to traditional-based education.⁸

A literature search conducted on the Situational awareness within objective structured clinical examination stations in undergraduate medical training - A systematic search was performed pertaining to SA and OSCEs, to identify studies published between January 1975 (first paper describing an OSCE) and February 2017, in peer reviewed international journals published in English. PUBMED, EMBASE, PsycINFO Ovid and SCOPUS were searched for papers that described the assessment of SA using OSCEs among undergraduate medical students. Key search terms included "objective structured clinical examination", "objective structured clinical assessment" or "OSCE" and "non-technical skills", "sense-making", "clinical reasoning", "perception", "comprehension", "projection", "situation awareness", "situational awareness" and "situation assessment". Boolean operators (AND, OR) were used as conjunctions to narrow the search strategy, resulting in the limitation of papers relevant to the research interest. Areas of interest were elements of SA that can be assessed by these examinations. he initial search of the literature retrieved 1127 publications. Upon removal of duplicates and papers relating to nursing, paramedical disciplines, pharmacy and veterinary education by title, abstract or full text, 11 articles were eligible for inclusion as related to the assessment of elements of SA in undergraduate medical students. Review of the literature suggests that whole-task OSCEs enable the evaluation of SA associated with clinical reasoning skills. If they address the levels of SA, these OSCEs can provide supportive feedback and strengthen educational measures associated with higher diagnostic accuracy and reasoning abilities. Based on the findings, the early exposure of medical students to SA is recommended, utilising OSCEs to evaluate and facilitate SA in dynamic environments.⁹

A qualitative study was conducted Towards the implementation of OSCE in undergraduate nursing curriculum. The study aimed to explore the perception of nursing faculty members regarding the implementation of the OSCE as an assessment tool in Catalan Nursing Schools. fifteen teachers participated in semi-structured interviews in eight Catalan Nursing Schools. Semi-structured interviews were conducted. A thematic content analysis was used to identify major themes in the interview data and collaborative analysis was undertaken to ensure rigorous results. The relevant aspects that are emphasized by teachers included the consideration of the dual purpose of the OSCE via its formative and evaluative facets by enhancing the feedback received by students about their performance on the OSCE. The OSCE should be administered towards the end of the degree program and should complement other methods of assessment. Despite its high cost, the OSCE was deemed to be efficient as it enables student competencies to be assessed with objective criteria, which is a difficult task with other instruments. OSCE implementation is feasible with the institutional support of and collaborative work between schools. The implementation of the OSCE in the Catalan undergraduate nursing degree



programs is feasible if the project receives the support of all involved parties and if creative strategies are determined to reduce economic costs and optimize resources. With adequate feedback, the OSCE is an assessment tool that can provide high-impact training to students.¹⁰

Challenges of objective structured clinical examination in undergraduate nursing curriculum: Experiences of faculties and students. The aim of this study was to explore and describe challenges associated with OSCE implementation based on the experiences of faculty members and nursing students, with the objective of further improving the assessment of clinical competence in nursing education. This study used a qualitative approach that included thematic analysis of the transcribed interviews. Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences (TBZMED), Tabriz, Iran. Purposive sampling was used to select eighteen faculty members and fifteen students from those interested. These participants represent a reasonable cross-section of those who had participated in the OSCE. A pre-developed interview guide was used to inform semi-structured in-depth interviews. These were recorded and analysed using the 6-phase thematic analysis method as described by Braun and Clarke (2013). Themes were independently verified. Challenges identified by participants around OSCEs as part of undergraduate nursing education were extracted from the interview data. Two main themes were evident from the data: 1) shortcomings in executive and technical infrastructure, 2) shortcomings in educational infrastructure. These themes reflected both student and faculty experiences. These also aligned with themes that commonly emerge in related literature. The study findings illustrate several key challenges associated with organizing and implementing OSCEs and so provides unique insights into the development of strategies to implementing and promoting OSCEs in nursing education. We recommend that managers and authorities in nursing education focus on these challenges and explore processes to successfully introduce this exam for assessment of nursing student capacity.¹¹

A study was conducted to assessing the impact of telehealth objective structured clinical examinations in graduate nursing education. The purpose of this article is to describe the implementation of a no-cost telehealth simulation and its impact on students in their first NP clinical course. Twenty-eight NP students participated in the telehealth objective structured clinical examination (OSCE). Students completed an online survey about the impact of telehealth OSCE simulation both before and after the simulation. Result of the study was the students' general understanding of the field of telehealth was significantly greater after the telehealth OSCE experience. Directed content analysis revealed 3 themes: usefulness of telehealth, benefit in role preparation, and technology. The study concluded that the use of telehealth simulation can be an effective strategy to assess clinical competency, provide individualized feedback, and ensure students are using evidence-based practice.¹²

A quasi experimental study was conducted to assess the Impact of high-fidelity simulation exposure of nursing students with their objective structured clinical examination. The study aimed to establish the impact of high-fidelity simulation (HFS) in the objective structured clinical examination (OSCE) of nursing students enrolled in four undergraduate courses (medical-surgical, critical-care, maternal-health and paediatric nursing). The students were



divided into two: those who were exposed to HFS in addition to their clinical training and the other group who underwent clinical training without HFS exposure. The combined mean midterm and final OSCE results of the group of nursing students with HFS exposure and those without HFS exposure were 92.58 and 82.66, respectively, with a mean between-group difference of 9.92% (p < .01). Our findings reveal that the HFS exposure in addition to clinical training enhanced the students' OSCE performance.¹³

A systematic review was conducted to assess the tools to reduce first year nursing students' anxiety levels prior to undergoing objective structured clinical assessment (OSCA) and how this impact on the student's experience often their first clinical placements review seeks to present the best available evidence into strategies that help reduce first year nursing students' anxiety levels prior to undergoing OSCA and clinical placement. A systematic literature search was performed using Medline and CINAHL. This review considered any English language original research published between 2005 and 2013. A literature search located 117 articles. Eight articles were identified as meeting the inclusion in criteria. Results of this study shows that, Majority of studies reported simulation session prior to the OSCA increased students' confidence and reduced their anxiety levels. This resulted in students' reporting that they valued the OSCA as a worthwhile assessment. However, there were four major themes: that students were anxious about attending the OSCA; that adequate preparation was seen as a coping strategy; that simulation was a further cause for anxiety; and that the simulation experience could also be used as an OSCA tool. Students who have been exposed to simulation scenarios before the OSCA are able to cope much better during the OSCA. Therefore, it is highly recommended to incorporate simulation scenarios into the nursing curricula for first year nursing students' clinical units to help reduce their anxiety levels prior to OCSA.¹⁴

A qualitative study was conducted to assess the Challenges of objective structured clinical examination in undergraduate nursing curriculum: Experiences of faculties and students. The aim of this study was to explore and describe challenges associated with OSCE implementation based on the experiences of faculty members and nursing students, with the objective of further improving the assessment of clinical competence in nursing education. This study used a qualitative approach that included thematic analysis of the transcribed interviews. Setting of the study was Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences (TBZMED), Tabriz, Iran Purposive sampling was used to select eighteen faculty members and fifteen students from those interested. These participants represent a reasonable cross-section of those who had participated in the OSCE. A pre-developed interview guide was used to inform semi-structured in-depth interviews. These were recorded and analysed using the 6-phase thematic analysis method as described by Braun and Clarke (2013). Themes were independently verified. Challenges identified by participants around OSCEs as part of undergraduate nursing education were extracted from the interview data. Two main themes were evident from the data: 1) shortcomings in executive and technical infrastructure, 2) shortcomings in educational infrastructure. These themes reflected both student and faculty experiences. These also aligned with themes that commonly emerge in related literature. The study findings illustrate several key challenges associated with organizing and implementing OSCEs and so provides unique



insights into the development of strategies to implementing and promoting OSCEs in nursing education. We recommend that managers and authorities in nursing education focus on these challenges and explore processes to successfully introduce this exam for assessment of nursing student capacity.15

The using Objective Structured Clinical Examination (OSCE) as Education in Advanced Practice Registered Nursing Education. As mentioned, OSCEs have been used in medical graduate education as an evaluative tool (Lafleur, Cote, & Leppink, 2015). Approximately 3 million nurses make up the U.S. health care workforce. The Robert Wood Johnson Foundation and the Institute of Medicine (2011) supported the call to strengthen the nursing profession by establishing global standards of educational criteria and outcomes. Throughout the world, health education is affected by fundamental inadequacies related to static, fragmented, and contentoriented curricula. There are inadequacies in our curricula, and nursing faculties are facing challenges with clinical placements (both the number and quality of these placements); therefore, alternative methods of providing practice to students need to be considered. A transformative agenda comprising changes in the way students are taught fully harnessing the potential of information and communications technology (i.e., simulation) is necessary. Simulated patient encounters and Objective Structured Clinical Examinations are 2 means to achieve needed practice in a safe environment. The purpose of this article is to show, by using simulation, how students can practice and be evaluated within their clinical practice role in a safe, controlled environment. In addition, this practice can (a) enable students to increase the complexity of their understanding and their autonomy and (b) educate students about social accountability, health and gender equity, social justice, and human rights.¹⁶

Attitudes of Nursing Faculty Members and Graduates towards the Objective Structured Clinical Examination (OSCE). The aim of this study was to evaluate the attitudes of faculty and graduates of college of nursing towards Objective Structured Clinical Examination (OSCE) as a valid and reliable method of clinical competency assessment in nursing ten years after its inception. Core nursing courses are based on instructional teaching methods and "hands-on" approach to impact cognitive, psychomotor skills and clinical judgments. Different clinical competency assessment methods are used globally; however, most of them are subjective. A descriptive survey using 16-item five-point likert scale questionnaire was conducted. The study sample consisted of 140 participants: 20 faculty members, 27 graduates of the Bachelor of Science in Nursing (BSN) Degree and 93 graduates of the Associate Degree of Nursing (ADN) programs with OSCE experience during their training. Data collection was carried out between October and November 2015. Eighty percent of faculty members, 74% of BSN and 62.3% of ADN graduates agreed that OSCE represented an objective evaluation method for psychomotor skills. Majority of the graduates perceived their OSCE experience positively although stressful. However, they have suggested the introduction of trial/mock OSCE prior to each exam to minimize the stress associated with it. In conclusion, there appears to be no single "goldstandard" assessment tool for clinical competency. OSCE assesses student nurses' psychomotor skills in a non-clinical environment, therefore without risks to real patients. In combination with other assessment methods in the clinical settings, OSCE will provide a more comprehensive



student psychomotor skill evaluation. OSCE experiences gave new nursing graduates confidence to work as registered nurses in health care settings.¹⁷

Implementation and student evaluation of clinical final examination in nursing education. To describe the process of developing valid clinical examinations for nursing students at the end of the final semester and to evaluate students' perceptions of these examination formats. Based on earlier research, overall goals for the degree of Bachelor of Science in Nursing and guided by both task-related and relational aspects of nursing, two clinical final examinations were developed and tested. One was a standardized test of performance in vitro using Objective Structured Clinical Examination (OSCE) based on five specific areas in which newly graduated nurses had shown deficiencies. The other was a test of performance in real conditions, in vivo, using Bedside Observation Examination (BOE) assessing nurse-patient relation, entirely based on patients' needs. Three classes of students (n = 203) were asked to participate and answer a study-specific questionnaire. The students highly valued the two examinations and perceived that the knowledge and skills tested were relevant to nurses' work. They found the examinations stressful, but at the same time meaningful, and felt they could do themselves full justice through this form of examination. The assessment test should be chosen depending on the preferred outcome. The OSCE, with its high degree of standardization, is appropriate to use to assess taskrelated aspects of nursing (show how), while the BOE, with its low degree of standardization, is suitable in real settings and has the potential to capture the relational aspects of nursing (does).¹⁸

An implementation framework for using OSCEs in nursing curricula. The implementation framework outlined in this paper has been developed from feedback of a trial across three different nursing and midwifery programmes and is designed to assist educators to incorporate OSCEs within their curricula. There is value in flagging the pedagogical principles embodied in the framework and alerting educators to their importance for more meaningful student learning. For each step practical advice is provided contributing to the utility of this approach. Considerations are systematic ensuring that the use of OSCEs in health care curricula assures judicious use of resources to achieve desired student outcome.¹⁹

Implementation and evaluation of peer assessment of clinical skills for first year student nurses Enabling student nurses to learn and develop evidence-based clinical skills is the cornerstone of nursing education programmes. This article describes the implementation of a peer assessment scheme for clinical skills within a skills laboratory in a university school of nursing, and the link between peer assessment and clinical skills development. This was a qualitative evaluative study that used questionnaires for data collection and was undertaken on one cohort of students. Findings showed that nearly half of all the statements made by students were about the positive impact of PACS on their skills learning. Students identified giving and receiving peer feedback, reflection and working with peers in small groups as being particularly valuable in clinical skills learning. Increased confidence was also a dominant finding as was the value of repeated practice in a simulation setting on skills development. This study supports some of the previous literature related to use of simulation and peer assessment but the discussion presented



in this article also highlights that the findings of this study contradicts other findings in the literature. What makes this study unique is its contribution to the literature is the link that was established by students between the peer-assessment process and clinical skills learning.²⁰

A course for nurses to handle difficult communication situations. A randomized controlled trial of impact on self-efficacy and performance. To evaluate the impact of a communication skills course for nurses on how to handle difficult communication situations in their daily work.A 7h course was developed using a construct of "Awareness, Feelings, Listen, Solve" (AFLS). A pedagogy of experiential, learner-centered learning was adopted. The course evaluation used a randomized controlled design with pre- and post-measures of self-efficacy and performance. Forty-one nurses volunteered and thirty-three nurses completed all assigned parts of the study. On self-assessment, there was significant improvement for self-efficacy (F = 24.43, p < 0.001), but not for emotional awareness. On performance, there was no significant improvement between intervention and control groups (F = 3.46, p = 0.073) A short course for nurses on handling difficult communication situations achieved significant improvements in self-efficacy but not in performance. Teaching communication skills in community-based settings is important for the safety and effectiveness of patient care. Sponsoring organizations should weigh trade-offs between feasibility and achievement of measurable improvements in performance. One possible approach is to focus on specific communication skills rather than a full suite of skills.²¹

RESULTS: Studies shows that, students were accepted this strategy and it improved their clinical competencies and made them confident to face clinical challenges. Faculties accepted the values and importance in nursing education. This review can conclude that students exhibited favourable perspectives toward using OSCE, contributing to the development of clinical skills, and increasing self-confidence in their knowledge. Conducting more research related to the comparison of OSCE to clinical practice scores outcomes is advised and strategies for lowering stress and cost exam are recommended.

Study concluded that, the five-station OSCE provides an authentic and objective assessment of competence among newly graduated nurses. The findings reveal that there are a number of controllable factors impacting on midwifery students' feelings of safety in the assessment environment, and that these should be addressed to maximize the advantages that the OSCE has to offer in terms of learning and preparation for clinical practice. One of the other study conclude that OSCE is a more credible assessment format to evaluate the clinical competence of undergraduate nursing students compared to the TCE method.

OSCEs offered strengths in terms of learner satisfaction and increased self-efficacy for this cohort. There was limited evidence supporting the effects of OSCEs within post-registration nursing education in comparison with other educational tools. Further research is needed to explore whether the knowledge gained in OSCEs is translated into clinical practice and whether simulation-based education is more effective in achieving enhanced knowledge compared to traditional-based education. Future research is required using RCT methods to compare the



impact of OSCE to traditional-based education. Based on the findings, the early exposure of medical students to SA is recommended, utilising OSCEs to evaluate and facilitate SA in dynamic environments. With adequate feedback, the OSCE is an assessment tool that can provide high-impact training to students. The study findings illustrate several key challenges associated with organizing and implementing OSCEs and so provides unique insights into the development of strategies to implementing and promoting OSCEs in nursing education. We recommend that managers and authorities in nursing education focus on these challenges and explore processes to successfully introduce this exam for assessment of nursing student capacity.

The study concluded that the use of telehealth simulation can be an effective strategy to assess clinical competency, provide individualized feedback, and ensure students are using evidencebased practice. Our findings reveal that the HFS exposure in addition to clinical training enhanced the students' OSCE performance. it is highly recommended to incorporate simulation scenarios into the nursing curricula for first year nursing students' clinical units to help reduce their anxiety levels prior to OCSA. The study findings illustrate several key challenges associated with organizing and implementing OSCEs and so provides unique insights into the development of strategies to implementing and promoting OSCEs in nursing education. We recommend that managers and authorities in nursing education focus on these challenges and explore processes to successfully introduce this exam for assessment of nursing student capacity. this practice can (a) enable students to increase the complexity of their understanding and their autonomy and (b) educate students about social accountability, health and gender equity, social justice, and human rights. there appears to be no single "gold-standard" assessment tool for clinical competency.

OSCE assesses student nurses' psychomotor skills in a non-clinical environment, therefore without risks to real patients. In combination with other assessment methods in the clinical settings, OSCE will provide a more comprehensive student psychomotor skill evaluation. OSCE experiences gave new nursing graduates confidence to work as registered nurses in health care settings. The OSCE, with its high degree of standardization, is appropriate to use to assess taskrelated aspects of nursing (show how), while the BOE, with its low degree of standardization, is suitable in real settings and has the potential to capture the relational aspects of nursing (does. For each step practical advice is provided contributing to the utility of this approach. Considerations are systematic ensuring that the use of OSCEs in health care curricula assures judicious use of resources to achieve desired student outcome. Sponsoring organizations should weigh trade-offs between feasibility and achievement of measurable improvements in performance. One possible approach is to focus on specific communication skills rather than a full suite of skills

DISCUSSIONS

Principle findings: Although there is a strong interest among researchers, nursing faculties, and nursing students in the use of OSCE in nursing education. It is very acceptable teaching method it is



known about its effectiveness. Moreover, at present, the use of OSCE help the students to manage complex scenarios in real world. To our knowledge, this is the first study that provides a comprehensive summary of research assessing the effectiveness of OSCE in nursing education.

Published research has yielded mixed results. Examining evidence reported in 05 reviews 15 studies that assessed a total of 16043 original studies, this systematic review found that, overall, the impact of OSCE in nursing education is promising. The majority of the 17 reviews focused on the wide impact and acceptance of OSCE in nursing faculties and students.

IMPLEMENTATION AND DISSEMINATION OF OSCE IN NURSING EDUCATION

OSCE has high impact in nursing education. Europe and other western countries already implemented OSCE in nursing education and practice. Majority of the study showing that it has wide acceptance. Therefore, it should be make students and faculties more skilful than before.

LIMITATION OF THE STUDY: In this review only involved 5 reviews and 15 original studies. Study limited from 2010 to 2023. The study which was conducted before 2010 were not accepted. This review limited up to 20.

CONCLUSION: - Most of the study pointing out that, it is widely acceptable teaching method. It enhances the skill and knowledge of students.

RECOMMENDATION: OSCE can implement in various health care professions. It will enhance skill and knowledge of the facilities and students. it will remove the anxiety, fear and stress. It will enhance the interpersonal relationship and communication

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REFERENCES

- 1. R. M. Harden (1988) What is an OSCE?, Medical Teacher, 10:1, 19-22, DOI: 10.3109/01421598809019321
- 2. 2. Rushforth, Helen. (2007). Objective Structured Clinical Examination (OSCE): Review of literature and implications for nursing education. Nurse education today. 27. 481-90. 10.1016/j.nedt.2006.08.009.
- 3. Montserrat Solà-Pola, Victòria Morin-Fraile, Núria Fabrellas-Padrés, Marta Raurell-Torreda, Lourdes Guanter-Peris, Eva Guix-Comellas, Anna M. Pulpón-Segura, The usefulness and acceptance of the OSCE in nursing schools, Nurse Education in Practice, Volume 43,2020,102736,ISSN 1471-5953,https://doi.org/10.1016/j.nepr.2020.102736.
- 4. Maysa Fareed Kassabry, Evaluation of simulation using objective structured clinical examination (OSCE) among undergraduate nursing students: Α systematic



review,International Journal of Africa NursingSciences, Volume18, 2023, 100553, ISSN 22141391, https://doi.org/10.1016/j.ijans.202 3.100553

- 5. Hongli Sam Goh, Elaine Ng, Mun Leong Tang, Hui Zhang, Sok Ying Liaw, Psychometric testing and cost of a five-station OSCE for newly graduated nurses, Nurse Education Today, Volume112, 2022, 105326, ISSN02606917, https://doi.org/10.1016/j.nedt.2022.105326. (https://www.sciencedirect.com/science/article/pii/S0260691722000624).
- Marcelina Szafranska, Kate Coveney, 6. Ciara Kirwan, Sally Horton, Lorraine Carroll, Midwifery students' experiences of objective structured clinical examinations: A qualitative evidence synthesis, Nurse Education Today, Volume 113, 2022, 105381, ISSN 0260-6917, https://doi.org/10.1016/j.nedt.2022.105381.(https://www.sciencedirect.com/science/arti cle/pii/S0260691722001174).
- 7. Sophia Cyril Vincent, Judie Arulappan, Anandhi Amirtharaj, Gerald Amandu Matua, Iman Al Hashmi,Objective structured clinical examination vs traditional clinical examination to evaluate students' clinical competence: A systematic review of nursing faculty and students' perceptions and experiences, Nurse Education Today, Volume 108, 2022, 105170, ISSN 0260-6917,https://doi.org/10.1016/j.nedt.2021.105170.(https://www.sciencedirect.com/science/arti cle/pii/S0260691721004275).
- 8. Montgomery A, Chang HR, Ho MH, Smerdely P, Traynor V. The use and effect of OSCES in post-registration nurses: An integrative review. Nurse Educ Today. 2021 May;100:104845. doi: 10.1016/j.nedt.2021.104845. Epub 2021 Mar 5. PMID: 33721715.
- 9. Fischer MA, Kennedy KM, Durning S, Schijven MP, Ker J, O'Connor P, Doherty E, Kropmans TJB. Situational awareness within objective structured clinical examination stations in undergraduate medical training - a literature search. BMC Med Educ. 2017 Dec 21;17(1):262. doi: 10.1186/s12909-017-1105-y. PMID: 29268744; PMCID: PMC5740962.
- Solà M, Pulpón AM, Morin V, Sancho R, Clèries X, Fabrellas N. Towards the 10. implementation of OSCE in undergraduate nursing curriculum: A qualitative study. Nurse Educ Today. 2017 Feb;49:163-167. doi: 10.1016/j.nedt.2016.11.028. Epub 2016 Dec 7. PMID: 27978445.
- Zamanzadeh V, Ghaffari R, Valizadeh L, Karimi-Moonaghi H, Johnston ANB, Alizadeh 11. S. Challenges of objective structured clinical examination in undergraduate nursing curriculum: Experiences of faculties and students. Nurse Educ Today. 2021 Aug;103:104960. doi: 10.1016/j.nedt.2021.104960. Epub 2021 May 14. PMID: 34015680.
- Phillips, Tiffany A. DNP, RN, NP-C; Munn, Allison C. PhD, RN; George, Tracy P. 12. DNP, RN, APRN-BC, CNE. Assessing the Impact of Telehealth Objective Structured Clinical Examinations in Graduate Nursing Education. Nurse Educator 45(3):p 169-172, 5/6 2020. DOI: 10.1097/NNE.000000000000729.
- 13. 13.Guerrero, J. G., Rosales, N. S., & Castro, G. M. T. (2023). Impact of high-fidelity simulation exposure of nursing students with their objective structured clinical examination: A quasi-experimental study. Nursing Open, 10, 765–772. https://doi.org/10.1002/nop2.1343



- 14. Annette Stunden, Elizabeth Halcomb, Diana Jefferies, Tools to reduce first year nursing students' anxiety levels prior to undergoing objective structured clinical assessment (OSCA) and how this impacts on the student's experience of their first clinical placement, Nurse 987-991,ISSN Education Today, Volume 35, Issue 9,2015,Pages 0260-6917, https://doi.org/10.1016/j.nedt.2015.04.014.
- (https://www.sciencedirect.com/science/article/pii/S0260691715001860). 15.
- 15 Vahid Zamanzadeh, Reza Ghaffari, Leila Valizadeh, Hossein Karimi-Moonaghi, 16. Amy N.B. Johnston, Samaneh Alizadeh, Challenges of objective structured clinical examination in undergraduate nursing curriculum: Experiences of faculties and students, Nurse Education Today, Volume103, 2021, 104960, ISSN0260-

6917, https://doi.org/10.1016/j.nedt.2021.104960.

- (https://www.sciencedirect.com/science/article/pii/S0260691721002173). 17.
- 16. Teri Aronowitz, Shoshana Aronowitz, Jennifer Mardin-Small, BoRam Kim, Using 18. Objective Structured Clinical Examination (OSCE) as Education in Advanced Practice Registered Nursing Education, Journal of Professional Nursing, Volume 33, Issue 2, 2017, Pages 119-125,ISSN 8755-

7223,https://doi.org/10.1016/j.profnurs.2016.06.003.(https://www.sciencedirect.com/science/ article/pii/S8755722316300370).

- 19. 17 E. Omu, F. (2016) Attitudes of Nursing Faculty Members and Graduates towards the Objective Structured Clinical Examination (OSCE). Open Journal of Nursing, 6, 353-364. doi: 10.4236/ojn.2016.65037.Received 6 February 2016; accepted 6 May 2016; published 9 May 2016.
- 20. 18. Gunilla Mårtensson, Anna Löfmark, Implementation and student evaluation of clinical final examination in nursing education, Nurse Education Today, Volume 33, Issue12,2013, Pages15631568, ISSN02606917, https://doi.org/10.1016/j.nedt.2013.01.003.(htt ps://www.sciencedirect.com/science/article/pii/S026069171300004X).
- 21. 19. Henderson A, Nulty DD, Mitchell ML, et al. An implementation framework for using OSCEs in nursing curricula. Nurse Education Today. 2013 Dec;33(12):1459-1461. DOI: 10.1016/j.nedt.2013.04.008. PMID: 23683816.
- 22. 20. Sue Rush, Terry Firth, Linda Burke, Di Marks-Maran, Implementation and evaluation of peer assessment of clinical skills for first year student nurses, Nurse Education in Practice, Volume 12, 4,2012,Pages 219-226,ISSN 1471-Issue 5953, https://doi.org/10.1016/j.nepr.2012.01.014.(https://www.sciencedirect.com/science/arti cle/pii/S1471595312000169).
- 23. 21. Daniel Doyle, H. Liesel Copeland, Donna Bush, Linda Stein, Scott Thompson,
- 24. A course for nurses to handle difficult communication situations. A randomized controlled trial of impact on self-efficacy and performance, Patient Education and Counseling, Volume 82, Issue 1,2011,Pages 100-109.ISSN 0738-3991,https://doi.org/10.1016/j.pec.2010.02.013.(https://www.sciencedirect.com/science/articl e/pii/S0738399110000479)