

PERCEPTION AND SATISFACTION WITH OBJECTIVE STRUCTURED CLINICAL EXAMINATION
AMONG UNDERGRADUATE NURSING STUDENTS IN ILORIN, KWARA STATE

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Abstract

The Objective structured clinical examination (OSCE) is an innovative evaluation method that is often used for assessing health sciences and nursing students' clinical skills. The OSCE consist of a scenario based assessment in which a student is required to demonstrate safe assessment and management of certain skills. This study was designed to assess perception and satisfaction with objective structured clinical examination (OSCE) among undergraduate nursing students in Ilorin, Kwara State. A descriptive cross-sectional survey was used for this study; purposive sampling technique was use to select 133 respondents from the study population who met the inclusion criteria. A self-administered questionnaire was used to collect data and there was 100% response rate. The data collected were analyzed using descriptive statistics such as frequency and percentages. The findings revealed that majority of the respondents had positive perception and were satisfied with OSCE. Therefore, it was recommended that nurse educators and clinicians need to intensify effort on training of students in OSCE and provide modification where necessary to enhance nursing students' competencies and performance

Keywords: *Nursing students, Objective structured clinical examination, Perception, Satisfaction, Undergraduate*

Introduction

The nursing profession is characterized by the fact that a significant amount of time is spent on competency-related activities. These competency-related activities are fundamental to the caring role of nurses and, as such, are central to the nursing curriculum. The assessment of clinical competence is therefore an important issue in nursing education, and the utilisation of objective structured clinical examination (OSCE) for that purpose is considered very important (Öner & Üstün, 2013). Solà-Pola et al (2020) have shown that OSCE test is an effective examination instrument to assess clinical skills and it is recommended for undergraduate nursing program. Furthermore, Traynor et al (2017) reported that OSCEs improve the quality of nursing education. (Bdair et al., 2019). The Objective structured clinical examination (OSCE) is an innovative evaluation method that is often used for assessing students' clinical skills. The OSCE was developed to overcome the problems related to old-fashioned assessment strategies. In particular, the OSCE is often used to evaluate the skills and attitudes that cannot be fulfilled through written format of examination. The OSCE consist of a scenario based assessment in which a student is required to demonstrate safe assessment and management of certain skills (Bdair et al., 2019; Smith et al., 2012).

During the OSCE, the students normally rotate a number of stations and they spend a specified time at each station. On a signal example, through the ring of a bell, the students move on to the next station preferably in a clock wise direction. The time allowed is the same for all the stations and the stations must be designed with this in mind. About 4 - 5 minutes is an appropriate time for each station. A further 30 seconds should be allowed for students to move from one station to another to complete any final comments. The number of OSCE examination stations varies from 12-15 or even 20 stations. Since the stations are independent of each other, the student can start at any of the stations and complete the cycle (Osaji et al., 2015; Smith et al., 2012). Therefore, strict control over the clinical context is possible in OSCE, as each student is required to demonstrate specific behaviours in a simulated work environment. while reflecting real-life professional tasks (Nafee et al., 2018; Solà et al, 2017). This control eliminates the "luck of the draw 'problem' that arises when students are assessed within the real-world clinical environment with actual patients as well as the risk of harm occurring to a patient (Nafee et al., 2018; Öner & Üstün, 2013). In addition, it is considered a true measure for essential clinical skills being evaluated, standardized, and not affected by social relations or students personality (Nafee et al., 2018).

Assessment of clinical competence is an essential requirement of nursing professional education and any method for assessing clinical competences of students should have these four criteria: objectivity, reliability, validity, and practicability (Nafee et al., 2018). Previous studies have shown that these four criteria are integral part of OSCE, thus, making OSCE a better assessment tool for examining and evaluating clinical students than the customary or traditional methods (Bdair et al., 2019; Nafee et al., 2018; Palese et al., 2012; Selim, 2012). Despite the fact that OSCE is gaining popularity in the practical examinations of the undergraduate nursing programs, the implementation of it in nursing education has some disadvantage and obstacles that limit its applicability. These drawbacks include the need for numerous examiners with two per station to maintain objectivity in the OSCE examination. Unfamiliarity of students' with OSCE exam and scoring criteria might harden its implementation. Cazzell and Rodriguez (2011) have shown that students failed to link the OSCE experience and clinical practice. Also, previous studies reported that majority of students experience high level of stress during an OSCE, which might negatively affect the performance of students. Consequently, this might undermine the validity and reliability of OSCEs (Ho et al., 2015; Öner & Üstün, 2013). Furthermore, anecdotal report showed that nursing students complaint that the OSCE is stressful and the time allocation for each station insufficient. However, the perception and satisfaction of students regarding OSCE is not clear. Therefore, it is important to explore satisfaction with OSCE from the perspective of the student, since they are the main stakeholders. Due to this reason, the study aimed at assessing perception and satisfaction with objective structured clinical examination (OSCE) among undergraduate nursing students in Ilorin, Kwara State.

Objectives of the Study

1. To assess the perception towards OSCE among undergraduate nursing students
2. To assess the level of satisfaction with OSCE among undergraduate nursing students

Methodology

A descriptive cross-sectional survey was adopted to assess perception and satisfaction with OSCE among undergraduate nursing students in Ilorin, Kwara State, Nigeria. The study was conducted in University of Ilorin, a federal university in Kwara State, Nigeria. Kwara State is one of the six states that make up the North Central geopolitical zone in Nigeria. The instrument for data collection was questionnaire. A purposive sampling technique was used to select a sample size of 133 respondents from the study population who met the inclusion criteria. The sample size was determined using fisher's formula. Data were collected using a self-structured questionnaire which elicited information on socio-demographic data of the respondents, perception of respondents on OSCE, respondents' satisfaction with OSCE and factors influencing respondents' satisfaction with OSCE. Face and content validity of the instrument was done by experts in the field of study, while the reliability of the instrument was determined using Split half reliability test and reliability coefficient of 0.75 was obtained, which showed that the instrument was reliable. The administered questionnaires were retrieved immediately and the process of data collection lasted over a period of 6 weeks. The data collected were coded and imputed into computer using Statistical Product and Service Solution (SPSS) version 25.0 and subsequently the data were analyzed using descriptive statistics in form of frequency table and percentage. The study followed the standard ethical principles guiding the use of human participants in research. Approval of research setting was obtained before administering the questionnaire. Consent was given by the participants after they were assured of no risks involved in answering the questions. The protection rights of the participant were ensured as participants were given the choice to withdraw from the research study voluntarily at any time. Confidentiality and anonymity were ensured as names were not

Results

Table 1: Perception about the objective structured clinical examination

Perception about OSCE	SA		A		U		D		SD	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Examination is fair	21	15.8	83	62.4	11	8.3	5	3.8	12	9.0
Wide range of knowledge is covered	16	12.0	81	60.9	13	9.8	9	6.8	14	10.5
Exam is well structured and sequenced	28	21.2	75	56.8	14	10.6	9	6.8	6	4.5

Exam is less stressful than other exams	16	12.1	48	36.4	26	19.5	25	18.9	17	12.9
Exam minimizes chances of failure	17	13.2	62	48.1	21	16.3	16	12.4	13	10.1
Allows students compensate in some areas	20	15.5	77	59.7	19	14.7	7	5.4	6	4.7
Time allocation for each station is adequate	10	7.6	63	48.1	16	12.2	25	19.1	17	13.0
Instructions is clear and unambiguous	21	16.3	83	64.3	14	19.0	6	4.7	5	3.9
The sequence of stations is logical and appropriate	25	19.1	86	65.6	13	9.9	3	2.3	4	3.1
OSCE scores provides a true measurement of essential clinical skill	17	13.0	52	39.7	27	20.6	26	19.8	9	6.9
OSCE scores are standardize	21	15.8	84	63.2	18	13.5	3	2.3	7	5.3
OSCE is a practical and useful experience	28	21.5	79	60.8	13	10.0	5	3.8	5	3.8
Personality and social relations do not affect OSCE scores	17	13.1	42	32.3	26	20.0	26	20.0	19	14.6
Examination does not prepare students for real life situations because life patients are not used	23	17.7	50	38.5	16	12.3	24	18.5	17	13.1
Silence of examiners is frightening	37	28.2	55	42.0	13	9.9	17	13.0	9	6.9
Nature of the examination makes students anxious	41	31.1	70	53.0	9	6.8	9	6.8	3	2.3
Student skills are not well assessed by the examination	22	16.7	55	41.7	23	17.4	17	12.9	15	11.4

Keys: SA: Strongly Agree **A:** Agree **U:** Undecided **D:** Disagree **SD:** Strongly Disagree

Table 1 shows that 21(15.9%) strongly agreed, 83(62.9%) agreed while 12(9.1%) strongly disagreed that examination is fair. 28(21.2%) strongly agreed, 75(56.8%) agreed while 9(6.8%) disagreed that exam is well structured and sequenced. Also, 17(13.2%) strongly agreed, 62(46.6%) agreed while 16(12.4%) disagreed that exam minimizes chances of failure. 20(15.5%) strongly agreed, 77(59.7%) agreed, 17(12.8%) strongly disagreed while 25(19.1%) disagreed that time allocation for each station is adequate. 21(15.8%) strongly agreed, 83(62.4%) agreed while 14(10.9%) were undecided that instructions is clear and unambiguous. 25(19.1%) strongly agreed, 86(65.6%) agreed while 13(9.9%) were undecided that the sequence of stations is logical and appropriate. 17(13.0%) strongly agreed, 52(39.7%) agreed 27(20.6%) were undecided while 26(19.8%) disagreed that OSCE scores provides a true measurement of essential clinical skill. 21(15.8%) strongly agreed 84(63.2%) agreed 18(13.5%) were undecided while 7(5.3%) strongly disagreed that OSCE scores are standardize. 28(21.5%) strongly agreed, 79(60.8%) agreed, while 5(3.8%) strongly disagreed that OSCE is a practical and useful experience. 17(13.1%) strongly agreed, 42(32.3%) agreed. 19(14.6%) strongly disagreed while 26(20.0%) disagreed that personality and social relations does not affect OSCE scores. 23(17.7%) strongly agreed, 50(38.5%) agreed, 17(13.1%) strongly disagreed while 24(18.5%) disagreed that examination does not prepare students for real life situations because life patients are not used. 37(28.2%) strongly agreed, 55(42.0%) agreed while 17(13.0%) disagreed that silence of examiners is frightening. 41(31.1%) strongly agreed, 70(53.0%) agreed while 9(6.8%) disagreed that nature of the examination makes student anxious. 22(16.7%) strongly agreed, 55(41.7%) agreed 15(11.4%) strongly disagreed while 17(12.9%)

disagreed that students' skills are not well assessed by the examination. It can be inferred from the table that the most of the respondents had positive perception about the objective structured clinical examination (OSCE)

Table 2: Satisfaction of Objective structured clinical examination

Satisfaction of Objective Structural clinical examination	Satisfied		Undecided		Not Satisfied	
	Freq	%	Freq	%	Freq	%
Time allocation for each station	61	46.6	25	19.1	45	34.4
Sequence of Stations	105	79.5	17	12.9	9	6.8
Range of Knowledge covered	86	65.2	21	15.9	25	18.9
Structure of Examination	91	68.9	23	17.4	18	13.6
Instructions given during exams	102	77.3	17	12.8	13	9.8
Levels of skills assessed	68	51.9	29	22.1	34	26.0
Silence of examiners even when mistakes are made by students	39	29.8	25	19.1	66	50.4
Use of mannequin instead of life patients	59	44.4	30	23.1	40	30.8
Attitude of examiners	40	30.8	28	21.5	62	47.7
General nature of examination	61	46.6	42	32.1	28	21.4

Table 2 shows that 61(46.6%) were satisfied with time allocation for each station, 25(19.1%) undecided while 45(34.4%) were not satisfied. 105(79.5%) were satisfied with the sequence of stations, 17(12.9%) were undecided while 9(6.8%) were not satisfied. 86(65.2%) were satisfied with the range of knowledge covered, 21(15.9%) were undecided while 25(18.9%) were not satisfied. 91(68.9%) were satisfied with the structure of the exam, 23(17.4%) were undecided while 18(13.6%) were not satisfied. 102(77.3%) were satisfied with the instructions given during examinations, 17(12.8%) were undecided while 13(9.8%) were unsatisfied. 68(51.9%) were satisfied with the level of skills assessed, 29(22.1%) were undecided while 34(26.0%) were unsatisfied. 39(29.8%) were satisfied with the silence of examiners, 25(19.1%) were undecided while 66(50.4%) were unsatisfied with the silence of examiners even when mistakes are made by the students. 59(44.4%) were satisfied with the use of mannequin instead of life patients, 30(23.1%) were undecided while 40(30.8%) were unsatisfied. 40(30.8%) were satisfied with the attitude of examiners, 28(21.5%) were undecided while 62(47.7%) were not satisfied. 61(46.6%) were satisfied with the general nature of the examination, 42(32.1%) were undecided while 28(21.4%) were unsatisfied. Therefore, it can be inferred from the table that the majority of the respondents were satisfied with OSCE.

Discussion of Findings

The study was conducted on perception and satisfaction with objective structured clinical examination (OSCE) among undergraduate nursing students in Ilorin, Kwara State. The study showed that majority of the respondents were between the age of 21-25, this implies that majority of the respondents were in their early 20. Also, majority of the respondents were female, this is due to the fact that majority of the students that is being admitted to study nursing in Nigeria are females. Also, the study was conducted among the nursing students of 3001 -5001, this is because it is at this various levels that the students are being exposed to OSCE. The study revealed that majority of the respondents agreed that the time allocated for each station is adequate. This correlates with a similar study conducted by Basgut and Abdi (2019) where almost similar percentage (77.3%) of the respondents perceived that the time allocated for each station is adequate. More than 60% of the respondents perceived the OSCE examination as being fair as that the instructions are clear and unambiguous. More than half of the respondents perceived that the OSCE is well structured and sequenced. Majority of the respondents agreed that OSCE scores are standardized, that it is a practical and useful experience which is in accordance with the study carried out by El-Sheikh and Abd El Aziz, (2015) that OSCE is an objective instrument for measuring clinical skills and its scores are standardized and that the form of examination provide the students with practical and useful experiences. Overall, the findings depict that majority of the respondents had positive perception towards OSCE. This corroborates the studies conducted in Ethiopia and Nigeria where majority of the respondents preferred OSCE and were positive about its examination structure (Fisseha & Desalegn, 2021; Sholadoye et al., 2019).

The study also revealed that majority of the students were satisfied with the OSCE, this was expressed through their satisfaction with the sequence of stations, range of knowledge covered and the level of skills assessed. This is in accordance with the study that was carried out by Basgut and Abdi (2019) where majority of the respondents indicated that they were satisfied with the assessment type of the OSCE. Furthermore, Ameh et al., (2014)

confirmed that students were satisfied with OSCE and preferred it over other assessment methods. The main reason for their preference was that OSCE truly measures their clinical skills and has more validity and reliability. Other studies have also shown that students appreciated OSCE as an evaluation tool for their clinical performance (Bdair et al., 2019; Fidment, 2012; Selim et al., 2012).

Conclusion

The study assessed perception and satisfaction with objective structured clinical examination (OSCE) among undergraduate nursing students in Ilorin, Kwara State. The study revealed positive perception and satisfaction with objective structured clinical examination (OSCE) among majority of respondents. Therefore, where Nurse Educators and Clinicians need to intensify effort on training of students in OSCE and provide modification necessary in order to increase cognitive and psychomotor skills of nursing students as well as their perception and satisfaction with (OSCE).

Recommendations

Based on the findings of this study, the followings are recommended:

1. Nurse Educators and Clinicians need to intensify effort on training of students in OSCE and provide modification where necessary to enhance nursing students' competencies and performance
2. OSCE should be adopted as an effective method of practical examination for all nursing training programs to eliminate prejudice and subjectivity

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