

# USING THE OSCE METHOD IN A SIMULATION CENTRE TO ENSURE EQUITY AND OBJECTIVITY IN ASSESSING THE COMMUNICATION AND RELATIONAL SKILLS IN A LARGE OF STUDENT NURSES DURING A LONG EXAMINATION SESSION

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## ABSTRACT

There is little known about OSCE use in European countries such as Italy, where other than cost analysis, there is little reporting of OSCE use or validation.

This paper reports on one Italian initiative, which evaluated the equity and objectivity of the OSCE method of assessing communication skills.

An OSCE method was used to assess the communication and relational skills of first-year students of the Degree Course in Nursing. A method of simulation was implemented through role-playing with standardized patients.

The study confirmed the validity of the OSCE method in ensuring equity and objectivity of communication skills assessment in a large population of nursing students for the purpose of certification throughout the duration of the examination. This has important implications for nurse education and practice as it is not clear the extent to which OSCE approaches are culturally sensitive, or valid and reliable across cultures.

Keywords: OSCE, Simulation, communications skills, Inter-rater evaluation.

## 1. INTRODUCTION

One of the problems connected with assessment efficacy often lies in the incongruence among training objectives, teaching methods and the instruments used to measure the outcomes of learning. While many methods are used to measure student performance, their choice must be guided chiefly by two criteria: appropriateness to the outcomes of learning and the objectivity of their assessments. In the international literature, numerous studies have reported that the application of the Objective Structured Clinical Evaluation (OSCE) methodology in the assessment of training and the certification of clinical and relational

skills is a guarantee of objectivity and equity. Some studies have described the use of the OSCE methodology in the certification of large numbers of students belonging to healthcare professions (Newbel, 2004) OSCE is a method of assessment that enables relational skills to be measured on the basis of the performances displayed by the students over a range of clinical behaviors with standardized patients. The prime objective is to assess the student's ability to implement theoretical knowledge in a simulated practical situation (Mc William & Botwinski, 2010). The OSCE examination is conducted in settings that are equipped to measure a set of clinical skills in a realistic manner through simulated clinical scenarios involving standardized patients. While the measurement of non-technical skills has been the subject of much debate the use of standardized patients and scales of observation for the assessment of communication skills has proved efficacious.

## 2. AIM

The aim of the present study was to evaluate the equity and objectivity of the OSCE method of assessing clinical learning with regard to communicative/relational skills among a large population of students over a long period of examination.

## 3. METHODS

The OSCE methodology was adopted to assess the communicative and relational skills of first-year students of the Degree Course in Nursing. To this end, an examination environment was specially designed, which reproduced the characteristics of a room in a hospital ward.

During examinations, a method of simulation was implemented through role-playing with standardized patients.

Examinations were conducted by following eight scripts structured in accordance with core competence. The scenarios were based on the phases of information and communication with patients undergoing diuresis monitoring and subjects with problems of mobility, hygiene, alimentation, hydration and arterial hypertension.

The objectives that students were expected to achieve concerned five observable behaviors regarding the communication of relevant information, the use of language appropriate to the patient, verification that information had been understood, active listening and reassurance of the individual through advice on the clinical situation. Student performance was evaluated by means of validated assessment tables (Guilbert, 2002); these covered four variables and were broken down into five levels of expected, observable communicative behaviour. To evaluate performance, an

Score	Terminology	Listening	Attention	Clarity
-2	Too detailed – not appropriate	Hears but does not listen	Pays no verbal or behavioral attention	Communication is not clear and information is not precise
-1	Too detailed – appropriate	Listens but does not re-state	Verbal and behavioral attention are inconsistent	Communication is not clear and information is not very precise
0	Appropriate – Not very precise	Listens and re-states but not always correctly	Pays verbal attention	Communication is not always clear and information is not always precise
+1	Appropriate but does not answer questions immediately	Listens and re-states correctly	Pays verbal and behavioral attention	Information is precise but communication is not always clear
+2	Answers questions Immediately	Checks whether SP has understood	Gives feedback to SP	Information is correctly understood

assessment scale indicating values between -2 and +2 was used, and a score was attributed to each communicative behaviour with respect to the variable in question. The variables referred to terminology, listening, attention and clarity. (Table 1)

**Table 1. Guilbert's Evaluation Grid used to score the students' communication skills during the OSCE examination**

## 4. RESULTS

All first-year students of the Degree Course in Nursing undergoing examination for clinical training certification (n=421) took part in the study. Ten examination sessions were conducted, the mean daily number of students examine being 42.1 (SD). With regard to the equity of the examinations, calculation of the daily pass rate indicated a random distribution over time.

The students from the 8 Training Centres were subdivided as follows: Center A 19%, Center B 12%, Center C 14%, Center D 10%, Center E 14%, Center F 17%, Center G 7% and Center H 7%.

For the Concordance of the scores and of the evaluations assigned by the examiners during the examination, Lin's Concordance Coefficient (CC) was calculated. The CC of the scores proved to be 0.993 (95% CI: 0.992-0.995,  $P<0.001$ ).

With regard to the concordance of the marks assigned by each examiner, the CC proved to be 0.992 (95% CI: 0.991-0.994,  $P<0.001$ ).

Regarding the concordance in the outcome of the final examination, Cohen's k index between the pass marks assigned by the two examiners proved to be 0.989 (95% CI 0.986-0.999,  $p<0.001$ ).

## 5. CONCLUSIONS

The study confirmed the validity of the OSCE method in ensuring equity and objectivity of communication skills assessment in a large population of nursing students for the purpose of certification throughout the duration of the examination.

The objectiveness of the results obtained can be ascribed to the preparation of the examiners. Indeed, the role of the examiners in ensuring the validity of the assessment is fundamental. Furthermore, to guarantee objectivity, it is essential that the examination, the assessment tools and the conduct to be adopted during the examination be agreed upon. In this regard, much attention was devoted to the issue of communication with the examinee, which must be limited to explaining the necessary instructions. Indeed, during the examination, the examiners were not allowed to communicate with the student. This becomes particularly important when students conclude their performance before the allotted time. Indeed, during the test of the relational skills, examiners had a neutral position, behind the student, to avoid any contact or interference with the examinee. The possibility of placing the examiners in another room from where they could observe the student's performance directly (through a one-way mirror) may be helpful. Nevertheless, all of the above-mentioned aspects were monitored through audiovisual recording, and

everything happening in the examination room was viewed in real time on a screen.

## REFERENCES

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