

OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS: REFLECTIONS FROM A NURSING PERSPECTIVE*

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ABSTRACT: This reflexive article aims to discuss the objective structured clinical examination and reflect on its use in the training of student nurses. It is a carefully structured examination which allows the improvement of the validity and reliability of the evaluation of aspects of the students' clinical competencies. In nursing, the Objective Structured Clinical Examination has been introduced as an evaluative tool on undergraduate courses, contributing to improve the training process; however, in spite of its growing use, few studies have been undertaken by nurses, constituting a challenge for the search for greater scientific knowledge through research.

KEY WORDS: Nursing; Education in nursing; Research in nursing.

*This manuscript won the Rosi Maria Koch prize at the 64th Brazilian Congress of Nursing.

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Received: 26/11/2012

Approved: 17/12/2013

INTRODUCTION

Over the last 50 years, the methods of evaluating students have changed, becoming increasingly complex. In the three decades of 1965-1995 there was growth in the efforts made to acquire innovation in education, moving from a standard of pen and paper to more evolved forms of assessing knowledge⁽¹⁾.

In the field of health, the evaluation of competencies is often a challenge for training programs, whether at undergraduate or postgraduate level. There are traditional models, such as oral examinations and multiple-choice questions, which focus on the assessment of clinical skills; and different models, such as the Objective Structured Clinical Examination (OSCE)⁽²⁾.

Created since the 1970s by Harden, the OSCE has become a popular method of evaluation, principally in the United States where it has been incorporated into the country's medical licensing examination. However, there are still repercussions concerning its superiority in comparison to traditional methods of clinical evaluation⁽¹⁾. The above-mentioned Clinical Examination consists of a performance-based examination evaluating clinical skills and competencies, in a reliable and valid way, which was heavily used originally in medical education⁽²⁾, in addition to other health contexts, such as nursing and odontology⁽³⁾.

It is an examination organized in various stations which the students rotate through, while being evaluated in specific tasks (anamnesis, physical examination, communication with the patient, among others)⁽³⁾ by one or two examiners, who scored the performance on a previously structured marking/time sheet⁽⁴⁻⁷⁾. Although different from the reality experienced in clinical practice, due to evaluating in a fragmented way, the OSCE is thought to be close to this reality⁽⁸⁾.

The stages of the OSCE assess, individually, the competencies relating to communication, bioethics, pedagogical aspects and critical evaluation⁽²⁾. Thus, the OSCE is fundamental for identifying gaps in the students' clinical perspicacity, and is efficacious for correcting the shortcomings which need the professors' time. Moreover, the exam is an excellent opportunity for the students to reflect on their performance and clinical abilities/skills⁽⁹⁾.

Because it is a method recently adopted for use by nursing, and because there is a gap existing in the studies on OSCE in this area of the health field, it was decided to undertake this study, which means to discuss the Objective Structured Clinical Examination and reflect on its use in the training of student nurses.

THE OBJECTIVE STRUCTURED CLINICAL EXAMINATION

The OSCE is a carefully structured examination, which results in the reduction of subjectivity on the part of the examining professors⁽²⁾. It has the ability to improve the validity and reliability of the assessments of many aspects of the clinical competencies, and may be undertaken in conjunction with other types of method of assessment for greater reliability, as well as being based on a wide range of scientific evidence⁽⁴⁾.

The standardization of this method of evaluation is obtained through using: 1) simulated scenarios - close to the reality of clinical practice - which are similar for all the candidates ; 2) standardized patients, trained to efficiently depict clinical situations, ensuring that all of the students confront similar situations⁽⁶⁾; 3) qualified examiners who may be offered training indicating the principles of how the examination functions and the understanding of the role which they have in this⁽⁶⁾; 4) checklists, carefully elaborated/revised to identify specific elements of the knowledge and skills of the examination, allowing the examinee's true performance to be reflected⁽⁴⁾; 5) scoring, which quantifies the student's performance in the skills evaluated^(2,10).

Steps for undertaking the Objective Structured Clinical Examination

To create an OSCE, firstly it is necessary to establish what shall be evaluated, given that this type of examination is not appropriate for evaluating all of the aspects of clinical competency. The activities selected must be in consonance with the students' level of learning and the course objectives. Their viability must also be taken into consideration, it being essential to use a model to plan an examination⁽⁶⁾.

This being the case, some points are mentioned as being highly useful for the functioning of the stations, such as: offering instructions to the students and examiners (informing the student clearly about the task to be carried out and explaining to the examiners their role and how to manage the station); listing the materials necessary; establishing the simulated scenario and the schedule (important aspects and time for each station); and deciding the need for a standardized or real patient and the characteristics of each individual, such as sex and age⁽⁶⁾.

Other aspects also indicated in the literature for the good functioning of the OSCE are⁽⁶⁾:

- prior to the OSCE: the stations may be in a single

compartmentalized room or may be undertaken in separate rooms; depending on the quantity of stations and candidates, more than one circuit may be conducted simultaneously. The recruiting of examiners and standardized patients may be done with prior notice and the stations must be numbered so as to avoid confusion with materials and the people involved. All the material necessary per station must be listed and verified prior to the day the examination is administered.

- On the day the OSCE is administered: the signs must be quite clear, emphasizing the rooms permitted for the students and patients, and those where it shall be carried out. The students' time at each station must be controlled, so long as it can be ensured that the students and examiners can hear sound, used clearly; helpers are necessary for guiding candidates, examiners and patients.
- After the OSCE: the sheets with the scores must be organized carefully.

Limitations and Benefits of the Objective Structured Clinical Examination

Although this examination is widely accepted, some limitations are mentioned in the literature, such as: high costs for implementing the OSCE (facilities, finances, personnel) when compared to other methods of evaluation; the time allocated for training the examiners and standardized patients; maintenance of the space in which the examinations occur; in addition to the need for further evidence proving the validity of its use⁽¹⁻²⁾.

In spite of the potential barriers relating to the OSCE, reports have emphasized various benefits arising from this examination. In these studies one can prove that the performance of those evaluated improved, allowed the standardization of small teaching groups and provided feedback for the professors, who received information on which aspects the learning of the skills should improve, in addition to reducing anxiety and increasing confidence regarding the practice circuits. Thus, through the use of the OSCE, one obtains results which are highly valid and important for decision-making⁽¹⁾.

The Objective Structured Clinical Examination in Nursing training

The academic training of the nurse has been the object of reflection and study for many years. The new curricular guidelines for Undergraduate Courses in Nursing have guided the changes in the training of

this professional, requiring a more critical, reflexive, flexible and versatile training⁽¹¹⁾. For this reason, the OSCE has been introduced as a tool for evaluating student nurses.

Within this context, following the approval of the UFRN's Research and Ethics Committee (Decision N. 147/2012), a research project titled "Patient safety: investigating to promote safety in the nursing care" was undertaken, which presented, among its methodological stages, the undertaking of the OSCE in the Skills Laboratory in the Health Sciences Center of the above-mentioned teaching institution; this project is being implanted in the Comprehensive Care II course, in the area of high complexity.

The OSCE developed was arranged previously in four stations, based on some of the international goals for patient safety, namely: 1) promoting appropriate hand washing; 2) improving safety in medication; 3) correct identification of patients; and 4) promoting effective communication (end-of-shift handover)⁽¹²⁾.

In undertaking this examination, the students evaluated had the opportunity to experience situations similar to those found in clinical practice, it being possible for these to reflect on the difficulties resulting from the topics addressed in the OSCE, on the responsibilities resulting from these issues, and on the communication necessary, as much with the patient as with the work team, thus contributing to the training of a professional qualified to provide efficacious and quality care.

In relation to the professors, these were able to visualize more easily the students who presented difficulties, also being able to intervene more efficaciously to improve the learning process. All this constitutes evidence for the relevance of using OSCE in Nursing, which requires those involved in the teaching-learning process to reflect on the use of this method of evaluation.

FINAL CONSIDERATIONS

Based on the above, one can gauge that a successful OSCE results from well-structured planning and coordination, using various resources and detailed evaluative data. In the midst of the significant expansion of the use of this examination, in the various courses in the area of health, it is fundamental to aim for the minimization of the occurrence of errors.

In the nursing setting, the OSCE is gaining space as an evaluative instrument in the teaching-learning process. However, in spite of the growing use of this method, there are scant studies undertaken by nurses

on the issue. As a result, it is necessary for there to be reflection on the part of these professionals in the search for greater scientific knowledge through the undertaking of further research on the OSCE, its reliability and validity, as well as on the resulting benefits for the students, the professors, and the clinical practice.

REFERENCES

1. Turner JL, Dankoski ME. Objective Structured Clinical Exams: A Critical Review. *Fam Med*. [Internet] 2008;40(8):574-8 [acesso em 10 ago 2012]. Disponível: <http://www.stfm.org/fmhub/fm2008/September/John574.pdf>
2. Jefferies A, Simmons B, Tabak D, Mcilroy JH, Lee KS, Roukema H, et al. Using an objective structured clinical examination (OSCE) to assess multiple physician competencies in postgraduate training. *Med Teach*. [Internet] 2007;29(2-3) [acesso em 12 ago 2012]. Disponível: <http://informahealthcare.com/doi/abs/10.1080/01421590701302290>
3. Dennehy PC, Susarla SM, Karimbux NY. Relationship Between Dental Students' Performance on Standardized Multiple-Choice Examinations and OSCEs. *Journal of J Dent Educ*. [Internet] 2008;72(5) [acesso em 10 ago 2012]. Disponível: <http://www.jdentaled.org/content/72/5/585.full.pdf+html>
4. Newble D. Techniques for measuring clinical competence: objective structured clinical examinations. *Med Educ*. [Internet] 2004;38(2) [acesso em 10 ago 2012]. Disponível: <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2923.2004.01755.x/pdf>
5. Ronald ME. Assessment in Medical Education. *N Engl J Med*. [Internet] 2007;356(4) [acesso em 11 ago 2012]. Disponível: <http://www.nejm.org/doi/full/10.1056/NEJMra054784>
6. Boursicot K, Roberts T. How to set up an OSCE. *Clin. teach*. [Internet] 2005;2(1) [acesso em 11 ago 2012]. Disponível: <http://onlinelibrary.wiley.com/doi/10.1111/j.1743-498X.2005.00053.x/pdf>
7. Patrício M, Julião M, Fareleira F, Young M, Norman G, Carneiro AV. A comprehensive checklist for reporting the use of OSCEs. *Med Teach*. [Internet] 2009;31(2) [acesso em 11 ago 2012]. Disponível: <http://informahealthcare.com/doi/abs/10.1080/01421590802578277>
8. Van der Vleuten CPM, Schuwirth LWT, Scheele F, Driessen EW, Hodges B. The assessment of professional competence: building blocks for theory development. *Best Pract Res Clin Obstet Gynaecol*. [Internet] 2010;24(6) [acesso em 11 ago 2012]. Disponível: <http://www.sciencedirect.com/science/article/pii/S1521693410000519#>
9. White CB, Ross PT, Gruppen LD. Remediating Students' Failed OSCE Performances at One School: The Effects of Self-Assessment, Reflection, and Feedback. *Acad Med*. [Internet] 2009;84(5) [acesso em 10 ago 2012]. Disponível: <http://www.ncbi.nlm.nih.gov/pubmed/19704203>
10. Payne NJ, Bradley EB, Heald EB, Maughan KL, Michaelsen VE, Wang XQ, et al. Sharpening the Eye of the OSCE with Critical Action Analysis. *Acad Med*. [Internet] 2008;83(10) [acesso em 11 ago 2012]. Disponível: <http://www.ncbi.nlm.nih.gov/pubmed/18820517>
11. Martinéli DD, Moura CR, Cesarino CB, Beccaria LM, Pinto MH, Paschoal VDA. Avaliação do currículo da graduação em enfermagem por egressos. *Cogitare enferm*. 2011;16(3):524-9.
12. Portal da Enfermagem. [Internet] 2010 [acesso em 12 ago 2012]. Disponível: http://www.portaldafenmagem.com.br/entrevistas_read.asp?id=42