

How to Run Psychiatry OSCE in Three days

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Objectivity, reliability and validity of examinations in psychiatry have always been one of the major concerns of experts in this discipline. Recently, objective structured clinical examination (OSCE) for its unique approach and by providing the requirements of psychiatric examinations has been a topic of interest. In Iran, an OSCE has been replaced the individual patient assessment (IPA) for examination of the National Board of Psychiatry. Although it is better to provide psychiatry OSCE in an extended time frame, in some cases this examination should be executed in a short period of time. For executing OSCE in psychiatry, especially if it should be performed in a short time, it requires addressing various points. In this article, based upon the previous experiences, we offer a standard format for establishing a practical, reliable and measurable OSCE in psychiatry in three days.

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Introduction

The Objective Structured Clinical Examination (OSCE) is used to assess the clinical skills of medical students and residents. From the 1970s, OSCE has shown its value and validity in education and clinical evaluation of different medical disciplines (1-5), but psychiatric educators have been slow to adopt this method of evaluation. Prior to 1995, only two studies were published regarding this topic in the field of psychiatry. Although various studies were designed using OSCE in psychiatry, due to its complexities and mentality of the psychiatric themes, only a few articles have addressed the use of OSCE and its effects on examinations of psychiatric residents (6-10).

OSCE is a set of scheduled clinical tasks that applicants accomplish in stations which are set up subsequently (1). As a new method of evaluation that allows clinicians to be observed performing in many different clinical situations, the OSCE is a major improvement over individual patient assessment (IPA) in which only one clinical encounter is observed (11). Combination of multiple observations and standardization of content and difficulty has made the OSCE a very popular evaluation tool, which has excellent psychometric properties (5). This method which is used in many clinical and psychiatric centers worldwide (5,12,13) has shown a credible validity and reliability (14-16).

In Iran, this method has proven its usefulness in the field of psychiatry in residency level. After many years of controversy among advocates and opponents of executing OSCE in psychiatry in Iran, this method was finally used in the oral examination of the Board of Psychiatry board in September of 2006.

OSCE has specific costs associated with the use of standardized patients, as well as materials, supplies, and the time of examiners and support staff (17). However, planning of OSCEs is greatly influenced by the

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educational needs of the institution and resources available, which interact with the psychometric requirements (the higher stakes the exam, the higher the reliability required). (5). For executing OSCE in psychiatry, especially if it should be performed in a short time, it requires addressing various points. In this article, based upon the experiences of a project carried out at Tehran Institute of Psychiatry and three national workshops [Tehran (18,19), Isfahan (20) and Sari (21)], and also the first examination of the National Board of Psychiatry which carries out by OSCE, we decided to offer a standard format for establishing a practical, reliable and measurable OSCE in psychiatry.

Materials and Methods

Background and goals:

At first, considering the applicants for whom the examination would be carried out, we should determine the practical goals of the examination. If we decide to design examinations for the residents at the level of National Board of Psychiatry, then among all goals cited in curriculum, we should determine goals which have a practical dimension. It is obvious that attitudinal goals due to their disputing aspects and inability to have objective definitions have no importance in this method. Theoretical knowledge is not considered, as it might be assessed using other examinations such as Multiple Choice Questions (MCQs).

The expected practical goals were extracted based upon the educational level and were evaluated and examined by a group of specialists. At first, goals which have more values are written on a list. Regarding listing of practical goals (which are shown in the vertical column), in horizontal row, a few themes are selected among the current topics in psychiatry. Thus, we begin to design blueprints, followed by designing stations.

Blueprint:

Before creating OSCE stations it is essential to create a matrix that outlines parameters for the exam: content areas, knowledge, skills and attitudes, station type,

and length (5). A pivot table is provided (Table 1.) and all expected goals for the level of education are listed in the vertical column. In the rows, for each of the tasks and goals, an appropriate theme such as a disorder or a psychiatric case is written.

Perhaps we could prepare these stages in advance through consultation with experts. Thus, we can save valuable time.

Table 1: Blueprint for executing OSCE

| | |
|---|---|
| Goal 1: Obtaining the current status of patient | A patient with major depressive disorder |
| Goal 2: Formulation | A patient with chronic schizophrenia |
| Goal 3: Urgent intervention | A patient with borderline personality disorder |
| Goal 4: Communication skills and consultation | Consultation with a mother of a child with ADHD |

Construct:

Following the preparation of specified blueprint based upon the educational level and type of examination (e.g. formative or summative), number of applicants and limitations of execution should be determined. One of the most difficult tasks in organizing an OSCE is finding an appropriate site for stations. The stations are areas in which evaluations are carried out. In practice, any space that has a series of contiguous rooms with several chairs can provide an acceptable site for an OSCE (5).

On the basis of the number of specified stations and number of experts present in the examination, the workgroups would be appointed to write scenarios. For example, if 15 examiners and 6 stations exist in examination, one can identify 3 threesome workgroups and 3 twosome workgroups based on the importance and difficulty of the station's task. Before participating in workgroups, the examiners should determine duration of each examination at each station as far as possible. Although it is not obligatory, one can design scenarios with a scheduled structure. The 15-minute time for allocating to each station in psychiatric OSCE is not too short for residents in losing the opportunity of performing tasks and neither too long that examination's reliability would be flawed.

The scenario and its details:

One scenario would be written for each station. The scenarios would be written based on the blueprint in which expected goals or tasks and also themes are specified. In this scenario, one should consider all necessary (and even less important) details. For instance, regarding the first part of table 1, we want to write a scenario for a patient afflicted by major depression in order to obtain his mental status examination.

After the approval of each workgroup, the scenarios would be discussed in a session by all examiners.

After confirmation of the primary scenario, following details will be extracted:

The instruction for standardized patient's performance:

If we get the standardized patient to play a role in specified station, it is obvious that he/she should play his/her role in a consistent and real manner. The instruction for correct, precise and obvious performance is one of the most important means for guiding the standardized patients (SPs). It is strongly recommended that an experienced standardized patient trainer train standardized patients (5).

Instruction for examinees:

Prior to entering the station, examinees should become familiar with the examination goals and themes. An instruction sheet would be available on the entrance door and also on the desk or table provided in the station. This sheet should demonstrate the station's goal and time and examination method in a concise format.

Mark sheet (exam checklist):

One of the most important duties of the examiners is designing the mark sheet; a set of items (usually from 10 to 30 items) used to score the appropriateness of the content of student history taking or the maneuvers of physical (5) examination in an OSCE. In this sheet, items expected from the examinee's performance are listed. These items are based on the Global Scoring Model (three or five

scored spectrum) or a Binary Scoring: an item or series of items, usually on a checklist, scored in a dichotomous fashion (Example: Yes or No, Done or Not Done). According to Hodges et al.'s study, the spectrum model has more validity to evaluate residents of psychiatry (5).

Only examinee's practical behaviors that exist with an agreement on their certainty should be listed in the Mark sheet.

Designing station:

Each workgroup should design the station according to the goal, theme and written scenario. Usually in each station, one of two approaches, either dependent or non-dependent on standardized patient would be used. In the first approach, standardized patient would play his/her role according to the instruction prepared for him/her. In the second approach, instead of using SP, one, the patient can use a moulage, algorithm, written items etc with prominent practical dimensions.

Stations should be concise and consistent with scenarios. Also, where the examiners, examinees and standardized patient are situated in the stations should be defined.

Appropriate means for standardized patients, examinees and examiners breaks should be available for few hours' habitation.

Preparing standardized patient:

The OSCE also incorporates the technology of standardized patients (11). The use of standardized patients allows the nature of problems and the level of difficulty to be standardized for all students (3), so it is one of the most important components of OSCE. If the station's approach is role playing of standardized patient, one should use a person who has been trained for this task and his/her full consent has been obtained. We should inform the standardized patient that our goal is not variety or creativity in role playing. In addition, he/she should not do any work beyond the specified role instructed.

Pilot testing:

After obtaining the examiners' agreement on executive accuracy of each station, we

should evaluate regularity and scheduled succession of stations. A preview of an OSCE station just prior to an examination (dry run) to ensure the fidelity of the portrayal and familiarizing the examiner with the nature of the station is necessary. It would be better to observe an OSCE station as it would function in an examination, by using a real standardized patient and a volunteer "student" before initiation of the exam. Since time management would be very important in this process, we should assign a person to control and monitor it.

A single bell wring would be heard one minute prior to the end of stations' time, which is followed by successive rings that notify the end of station's time. It is worth mentioning that the sound of the bell wring should be easily heard in all stations.

The score of each station:

Given the existing stations in each OSCE, we should agree on each station's score. To score each station, although we can consider various solutions based on the general agreement, one of the acceptable ways is a method in which examiners calculate a mean score as a minimum pass level score in each station. Then consider the sum of these means as a minimum score to pass the station.

Executing the examination:

After implementation of guidance session for examinees, examination would commence at a specified time. Examinees would be placed in a quarantine room and will enter into the stations area gradually. After passing the last station, examinees re-enter to another quarantine room, where evaluation and feedback would be performed.

Conclusion

In Iran, as in many other centers worldwide, utilization of OSCE in psychiatry residency is in its early stage. Our experiences similar to Canada (5,8), United States (16) and United Kingdom (22), reveal that there are several advantageous reasons at this early stage which make the OSCE preferable to traditional methods. One study demonstrated

that 100 percent of evaluators believe OSCE stations are able to measure applicants' skills (8). Moreover, 71 percent of psychiatry residents were satisfied with implementing the examination with this method (8). In another study, 89 percent of psychiatry residents considered the OSCE useful for evaluation of clinical abilities (9).

In other centers in the world, the usual time for traditional Individual Patient Assessment (IPA) is 2-3 hours (5), while the time of this examination in Iran is 45 minutes. Since the usual time of OSCE stations should be a manifestation of examination interview's real time, it appears that a 15-minute time limit for each station is appropriate for summative examination of Iranian residents in psychiatry.

OSCE not only entails all existing aspects of similar examinations, it also enables the applicant to confront with new practical and challenging aspects, which are not seen in traditional approaches. Consideration of various communicative layers with a standardized patient in OSCE is beyond the classical methods.

It is evident that prior to implementation, each of above details should be approved by group members and the evaluating teams.

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References

1. Harden RM, Gleeson FA. Assessment of clinical competence using an observed structured clinical examination *Med Educ* 1979; 13: 41-7.

2. Stillman PL, Swanson DB, Stillman AE, Ebert TH, Emmel VS. Assessing clinical skills of residents with standardized patients. *Ann Intern Med* 1986; 105: 762-71.
3. Vander vleuten CPM, Swanson D. Assessment of clinical skills with standardized patients: state of the art. *Teach Learn Med* 1990; 2: 58-76.
4. Sloan DA, Donnelly MB, Schwartz RW. The OSCE: the new gold standard for evaluation of post graduate clinical performance. *Ann Surg* 1995; 222: 735-42.
5. Hodges B, Hanson M, Mc Naughton, Regehr G. Creating, monitoring and improving a psychiatry OSCE: a guide for faculty .*Acad. Psychiatry* 2002; 26(3): 134-61.
6. Loschen EL: Using the objective structured clinical examination in a psychiatry residency. *Acad Psychiatry* 1993; 17: 95-100.
7. Famuyiwa OO, Zachariah MP, Ilechukwu ST. The objective structured clinical examination in undergraduate psychiatry. *Med Educ* 1991; 25(1): 45-50.
8. Hodges B, Hanson M, Mc Naughtan N, Regehr G. What do psychiatry residents think of an objective structured clinical examination. *Acad Psychiatry* 1999; 23: 198-204.
9. Sauer J, Hodges B, Santhouse A, Blackwood N. The OSCE has landed: one small step for British psychiatry. *Acad Psychiatry* 2005; 29(3): 310-5.
10. Taghva A, Mirsepassi GR, Zarghami M. A brief report on the implementation of an objective structured clinical examination (OSCE) in the 2006 Iranian board of psychiatry examination .*Iranian Journal of Psychiatry and Behavioral Sciences* 2007; 1(1) : 39-40.
11. Barrows HS, Abrahamson S: The programmed patient: a technique for appraising student performance in clinical neurology. *J Med Educ* 1964; 39: 802-5.
12. Yudkowsky R. Should we use standardized patients instead of real patients for high stakes exams in psychiatry. *Acad Psychiatry* 2002; 26: 187-91.
13. Michael A. OSCE in Psychiatry. New York: Churchill Livingstone; 2004.
14. Hodges B, Regehr G, Hanson M. An objective structured clinical exam for evaluating Psychiatric clinical clerks. *Acad Medicine* 1997; 72: 715-21.
15. Hodges B, Regehr G, Hanson M. Validation of an objective structured clinical examination in psychiatry. *Acad Medicine* 1998; 73: 910-2.
16. Park RS, Chibnall JT, Blaskiewicz RJ, Furman GE. Construct validity of an objective structured clinical examination (OSCE) in Psychiatry: association with the clinical skills examination and other indicators. *Acad Psychiatry* 2004; 28(2): 122-8.
17. Cusimano MD, Cohen R, Tucker W, et al: A comparative analysis of the costs of administration of an OSCE. *Acad Med* 1994; 69: 571-6.
18. Taghva A, Rasoulia M, Panaghi L, Bolhari J, Zarghami M, Nasr-esfahanii M, Hodges B. Validity and reliability of the first objective structured clinical examination (OSCE) in psychiatry in Iran. *Iranian Journal of Psychiatry and Clinical Psychology* 2007; 13(1): 17-24.
19. Bolhari J, Taghva A, Rasoulia M, Mohammadian M, Panaghi L, Amini H. Running the first psychiatry OSCE in Iran and satisfaction of consultants, residents, and standardized patients . *Iranian Journal of Psychiatry and Clinical Psychology* 2007; 13(1): 5-11.
20. Attari A, Mir-sepassi GR, Taghva A, Bolhari J, Aminoroaia M, Hasanzadeh A. Validity and reliability of an objective structured clinical examination in psychiatry: a guided survey. *Iranian Journal of Psychiatry and Clinical Psychology* 2007; 13(1): 41-8.
21. Zarghami M, Sheykh Mounesi F, Taghva A, Khalilian AR. Attitudes of Iranian residents toward objective structured clinical examination in psychiatry. *Iranian Journal of Psychiatry and Clinical Psychology* 2007; 13(1): 34-40.
22. Jasti M, Kakkilaya S. Psychiatric training in the United Kingdom. *Online J Health Allied Scs.* 2004; 4:4. Available from: URL: <http://www.ojhas.org/issue12/2004-4-4.htm>