MOLUCCA MEDICA (MM)
JURNAL KEDOKTERAN DAN KESEHATAN
ISSN 1979 – 6358, VOLUME 4, NOMOR 2, MARET 2014

DAFTAR ISI

DEVELOPMENT OF OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE) IN A NEW AND RESOURCE-LIMITED UNDERGRADUATE MEDICAL SCHOOL LIKE FACULTY OF MEDICINE PATTIMURA UNIVERSITY AMBON

Farah Christina Noya

Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Pattimura Ambon
e-mail:

Diterima 15 Juli 2012/Disetujui 24 September 2012

Abstract

The use of OSCE for performance-based assessments in medical schools is widespread and has been acknowledged as a reliable and valid measurement of clinical skills as compared with written assessment. At the moment, FMPU target the implementation of OSCE to start in 2012, as the first batch of FMPU students meet the requirement to become bachelor of medicine (Sarjana Kedokteran/S.Ked). With immediate initialization, FMPU need to develop OSCE from the beginning. Fortunately, National board of Indonesian Doctor examination (KBUKDI) together with Higher Education Directorate General (Dirjen Dikti) through Health Professional Education Quality (HPEQ) project have encouraged and equipped every medical tertiary institutions with workshops and training on OSCE preparation in which FMPU teaching staffs and skills instructors gained information, skills and competencies to implement OSCE in FMPU.

Keyworks: OSCE, FMPU, bachelor of medicine (Sarjana Kedokteran/S.Ked), National board of Indonesian Doctor examination (KBUKDI), Health Professional Education Quality (HPEQ).

BACKGROUND

Faculty of Medicine Pattimura University (FMPU) is a newcomer in medical education in Indonesia. Key issues that need to be addressed are limited experience in teaching and learning as well as limited facilities and staff resources. We are still learning from the leading medical schools in our country and internationally on how to improve the quality of our medical education, especially in competence and performance-based assessments like OSCE. Since Indonesia adapt competency-based curriculum and student-centered learning in national medical education, the use of OSCE beside National Examination or known as Ujian Kompetensi Dokter Indonesia (UKDI) has been a compulsory passing assessments for Indonesian doctors. Therefore the preparedness of each medical tertiary institution in the implementation of these assessments is importantly required.

The use of OSCE for performance-based assessments in medical schools is widespread and has been acknowledged as a reliable and valid measurement of clinical skills as compared with written assessment (Newble, 2004). At the moment, FMPU target the implementation of OSCE to start in 2012, as the first batch of FMPU

students meet the requirement to become bachelor of medicine (Sarjana Kedokteran/S.Ked). With immediate initialization, FMPU need to develop OSCE from the beginning. Fortunately, National board of Indonesian Doctor examination (KBUKDI) together with Higher Education Directorate General (Dirjen Dikti) through Health Professional Education Quality (HPEQ) project have encouraged and equipped every medical tertiary institutions with workshops and training on OSCE preparation in which FMPU teaching staffs and skills instructors gained information, skills and competencies to implement OSCE in FMPU. However, implementing OSCE in a resource-limited environment such as FMPU is challenging. Therefore, this review aimed to obtain details, facts, and direction toward development of OSCE in FMPU including budgeting and facilities, also human-resources and the implementation.

LESSON FROM OTHER COUNTRIES

Some learning points that can be taken from other countries medical tertiary institution can be motivations for FMPU to establish OSCE as student assessment of performance. Several studies (Lee and Ahn, 2006; Vargas, et al., 2007) report the implementation of OSCE in new and resource-limited medical tertiary institution. In Korea (Lee and Ahn, 2006), although development of OSCE for medical students assessmnet was first initialized in 1994, fifteen of 41 medical colleges had not been administering OSCE. However, they realized the importance of developing OSCE for students assessment. The reason for the implementation of OSCE for these medical colleges is for practical clinical skills education and in order to obtain feedback of students' performance during clerkship rotations. Eleven Korean Medical colleges used OSCE to evaluate their students' level of accomplishment after each clerkship rotation and eight (36.4%) used it as a summative assessment tool at the end of the complete clinical education course. There were six other schools that used OSCE before practical training as an introduction to clinical medicine. Majority of Korean medical colleges is quickly implementing the OSCE into their programs and is building clinical skill education and OSCE testing facilities. However, in the implementation, to answer local needs and purposes, OSCE format has been adapted. Dominantly, medical tertiary institution in Korea employed residents or other hospital personnel to simulate the role of patients because of the shortage in financial and human resources necessary for training (Lee and Ahn, 2006).

OSCE BUDGETING AND LOGISTIC

Budgeting for OSCE, one of the important factor in the implementation is not an issue that the teaching staff are in charge of. Thus, a strong commitment and support from the Dean, the Chancellor and the local government is hoped for. Except for the classical problems of budgeting, several elements of OSCE design such as Standardized Patient, case development, logistic and examiners are reviewed here, and strategies offered to adapt them to circumstances where fund, facilities and technology are limited.

Another element to examine is the logistic of OSCE. As a new medical school, we have limited facilities. At FMPU, the new faculty building together with the learning hospital will still be under construction until 2015. The local hospitals that are used for the teaching and learning process are not currently available to be used for OSCE. Therefore, for OSCE purposes we can only use 12 rooms in the main campus that are provided for skills laboratory, meaning a maximum of 12 stations for OSCE. According to Marks and Humphrey-Murto, 2009, ten to twelve stations appear to be reasonable settlement for a local medical school assessment. To balance the number of stations, session times can be adjusted to accommodates several skills in one station (Boursicot and Roberts, 2005; Lee and Ahn, 2006). For example, communication skills and history taking can be done in one 10 minutes station. Equipments and models are also important logistic in OSCE. We have stored and used the equipment from the 2008 budgeting and the World Bank loan through DIKTI HPEQ projects and they should be sufficient for OSCE in the FMPU with good maintenance.

HUMAN-RESOURCES AND THE IMPLEMENTATION OF OSCE

Standardized Patients (SP) is an important element of a high quality OSCE (Hanson, et al., 2002). The literature accept that utilising SPs in the curriculum can both improve and assess students' clinical skills (Petrusa, 2002; Stimmel et

al, 2006). While medical schools in many countries around the world use SPs to assess the clinical proficiency of medical students, there are considerable variation with recruitment, how they are employed as well as how they are trained and maintained (Hanson, et al., 2002; Petrusa, 2002; Vargas, et al., 2007). In Ambon where medical school was first established in 2008, the use of SP is definitely a new practice. In the local hospital where potential patients for examination can be found, we already utilised hospitalized patients for bedside teaching but not for student assessment purpose. It is generally assumed that the patient will be reluctant to voluntarily be involved in a structured assessment for medical students, but it is worth asking. In the meantime, strategies involving healthy people such as students from theater school or actors as simulated patients can be helpful (Hardoff and Schonmann, 2001). The use of mannequin and simulator can also advantageous (Bradley, 2006), while a perspective of using SPs as a way to enhance medical students' learning can be progressively introduced and socialized to the community. Choosing patients that suit an assessment blueprint and training the patients are extra tasks, so SP training and trainers are needed.

Once the patient for OSCE can be maintained and representation parameters are decided, case scenario for history taking and physical examination checklists can be developed (Vargas, et al., 2007). Literature also suggests that case scenario should be developed first before determining the appropriate patient for the scenario (Boursicot and Roberts, 2005). However, to develop case for OSCE is not an easy task. The blueprint is required to ensure the relevance of test content to the learning outcomes of the course (Boursicot and Roberts, 2005; Marks and Humphrey-Murto, 2009). It means that the assessment developer must be knowledgeable of the curriculum content, learning outcomes, and skills domain to decide the proportion of the station for the broader sampling. Our School has only just begun to establish OSCE. Therefore, benchmarking, workshops, training and learning from other faculties are needed for our staff on how to develop assessment blueprint, checklist and case scenario for OSCE. The initial experiences from KBUKDI-DIKTI HPEQ projects on OSCE have been advantageous for FMPU. The standard setting for OSCE also has to be decided. Since our future examiners are the faculty and hospital clinicians, the borderline group method (Smee and Blackmore, 2001) is supposedly efficient. Although workshops and training has equipped FMPU staffs, more training particularly training of trainers is needed to add the number of the OSCE examiner.

Examiners for OSCE can be faculty clinicians (Marks and Humphrey-Murto, 2009). For the FMPU, some hospital clinicians voluntarily agree under a memorandum of understanding (MOU) to participate as teacher, instructor and examiner. However, the limited number of faculty members and their limited time, constrained by patient care activities, can be a hindrance in training time and on examination day. Consequently, the schedule of the training and exam should be announced and re-announced to the examiner to be recorded in their planner (Boursicot and Roberts, 2005). Although much time is needed for examiner training, it is only needed once for the qualification. In addition, only a small amount of time is needed to introduce the purpose of the exam, the basic review of checklist and global score, and the feedback that should be provided for the examinees on the examination day (Marks and Humphrey-Murto, 2009). Hence, with a well-prepared schedule, OSCE will not take much of the clinicians' time.

SUMMARY

To sum up, even though the implementation of OSCE in resource-limited environments is not without challenges, with proper planning, faculty involvement, and well-prepared training programs, effective clinical skills evaluation programs can be develop and maintained. Some OSCE trainings for our teaching staff are needed in case development, checklist construction, scoring and psychometrics. Trainings for the examiners and patients are also needed for the faculty staff so that the quality of the assessment can be guaranteed. Once this assessment method starts being implemented in FMPU, and more data is collected regarding the evaluation of the implementation, a research can be carried out to further support the satisfaction of the assessment to the needs of FMPU and the global development of OSCE in FMPU.

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