The Effectiveness of OSCE mentorship for Passing on OSCE UKMPPD: an Experience from School Of Medicine Universitas Muhammadiyah Yogyakarta (UMY) 1Meida NS., 1Setyonugroho W., 1Suryandari G.

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Abstract

Introduction

Qualified and competent doctors in Indonesia has been produced for at least six years. At the end of their study they must be assessed by A High-Stakes National level examination called UKMPPD (Uji Kompetensi Mahasiswa Program Profesi Dokter) to assure national health quality services. There are two kind of assessments: cognitive will be assessed by MCQ-CBT, meanwhile skills and attitude will be measured by OSCE. There was many ways to enhance skills and OSCE UKMPPD passing score. One of effort from school of medicine UMY is using mentorship. This Study was conducted to analize whether OSCE mentorship can be effective to pass on OSCE UKMPPD.

Methods

This study used a pre-post experimental design with 153 participants who followed OSCE UKMPPD for period January-October 2017. Pre-test has been held 1 month before final exam with local comprehensive OSCE. The mentorship conducted in 1 month with 20 times departemental expert lectures, 40 times regulated independent learning OSCE and one time for formative simulated OSCE with direct feedback. OSCE UKMPPD result has been recorded as a post-test. Minimum requirement score for both of these test was more than 65. The data than analized using chi-square.

Results

There were significantly increased between pre and post test (p <0,05). Range of increasing result is was 0,52-29,63 and mean was $13,19\Box 6,1$. Highly increased of pre and post test result belongs to low-grade students who successfully pass the OSCE UKMPPD. There were two high-grade students (score >78) successfully passed this exam with lower increase of pre and post result (0,52;0,73). Generally there was improvement in passing score between local comprehensive OSCE and OSCE UKMPPD which was 54% to 98%.

Discussion & Conclusions

General Medical Council (2015) was reviewing about guidance for students to prepare for exams. This should include preparation countdown with key dates and preparation on finals. Therefore, School of Medicine UMY has conducted mentorship and the result showed that OSCE mentorship was effectively improves for passing on OSCE UKMPPD. The qualitativaly reasonable advantages of mentorship has been reported by Puspa Dewi et *al.* (2016). As a small discussion group, mentorship could bring motivational environment with constructive feedback and closely relationship between mentor and mentee. A qualitative study might be held latter for identify the

real reason that may cause the significantly increase passing score of OSCE UKMPPD on School of Medicine UMY.

Key words: OSCE, Mentorship, UKMPPD, Local Comprehensive OSCE, Passing Score

INTRODUCTION

Qualified and competent doctors in Indonesia has been produced for at least six years. At the end of their study they must be assessed by A High-Stakes National level examination called UKMPPD (Uji Kompetensi Mahasiswa Program Profesi Dokter) to assure national health quality services. There are two kind of assessments: cognitive will be assessed by MCQ-CBT, meanwhile skills and attitude will be measured by OSCE (Objective Structured Clinical Examination) (KKI,2012).

OSCE is best defined as "an approach to the assessment of clinical competence in which the components of competence are assessed in a planned or structured way". It allows examiners to assess the wide range of skills and behaviors of the candidates under varying degrees of difficulty and complexity by observing them interact with a standardized real or simulated patient. It is believed to be superior to oral examination as it allows multiple competencies to be assessed in one exam, and eliminate subjectivity that characterize other methods of assessment (Hamed *et al.*2012).

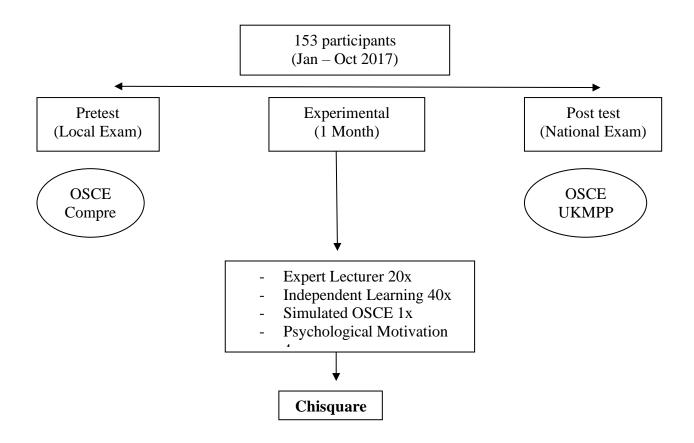
There was many ways to enhance skills and OSCE UKMPPD passing score. One of effort from school of medicine UMY is using mentorship. Mentorship is could bring to open discussion and perception, increasing motivation of student with constructive feedback and closely relation between mentor and mentee (Puspa Dewi & Rukmini, 2016).

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METHODS

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Picture1 . Expert Lecturer



Picture 2. Expert Lecturer



Picture 3. Independent Learning with Small Group Discussion



Picture 4. Simulated OSCE



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Table 1. Prosentase pass exam in OSCE Compre Group and OSCE UKMPPD

	OSCE COMPRE	OSCE UKMPPD	p	
	(Local Exam)	(National Exam)		
Student (Participant)	153	153	P < 0,05	
Pass exam (Score > 65)	54%	93%	1 (0,00	

Table 2. Increasing score in low grade student and high grade student

	Low Grade	High Grade student
	student	
Increasing score (Point)		
(Mean \pm SD = 13,29 \pm 6,1)	Until 29,13	0,5-0,7
	Benefit	

DISCUSSION

General Medical Council (2015) was reviewing about guidance for students to prepare for exams. This should include preparation countdown with key dates and preparation on finals. Furlong et al. (2005, 354) reported that 90% of students felt the OSCE was a stressful event, despite the majority also agreeing that they had been adequately prepared for the assessment. Preparation was seen as a key coping strategy for dealing with anxiety. The students in this study were clear that adequate structured preparation was important. From this study, formal preparation has now taken on a higher priority. Clinical skills sessions are planned around the types of skills and underpinning knowledge that will be expected from students. A practice OSCE is available to all

students to experience the assessment process and to understand the marking criteria (Susan et al, 2012).

To prepare students appropriately for the OSCE, the assessment strategy was discussed with students on the first day of the module, and given as written information in the module handbook. Students were encouraged to ask questions and discuss issues around the OSCE. Following on from this, clinical skills facilities were regularly used throughout the module to practice and engage in scenarios. However despite formal preparation, it became apparent from interview findings that some students did not feel appropriately prepared. This contributed to feelings of anxiety and stress. Some students felt that they had not received enough familiarisation with the simulation infant manikin (SIM baby) during the practical sessions. One participant talked during the interview of avoiding participation in any practical skills on the manikin during group work. This was attributed to feeling shy and being uncomfortable performing in front of the other students. However this meant the student had a disadvantage during the OSCE, as it would have been the first time she interacted with the simulated manikin (Susan *et al.*, 2012).

Simulation

Simulation and the role playing element of the OSCE was a further cause of anxiety communicated through interviews. Many of the students talked about negative issues regarding the realism of the simulated scenario. The interviewees conveyed concerns with the environment, equipment and the manikin (SIM baby). For students to be able to immerse themselves within the scenario and role playing, they had to feel the scenario was a believable situation. For many they struggled to make that connection. Equipment and the environment were often described as not realistic enough for them to feel as though this was a real life situation. Some students said that things were not set up as they would expect.

Simulation as a method for assessment is gaining popularity and has been validated as an educational tool within healthcare education (McGaghie 2010). However, for this to become a meaningful experience for the student, it is important to make the scenario, as realistic as possible, including the environment, equipment and manikins. The findings of this study revealed that some students struggled to make that connection of realism with the scenario, others were more positive and could identify with reality and clinical practice (Susan *et al*, 2012).

In terms of curriculum planning, there are techniques that faculty can implement in their teaching to help improve student concentration. Chunking lecture content and utilizing the pause procedure are two simple techniques which do not require a lot of time on the part of the faculty and can make a significant difference. Chunking is simply a practice of breaking up lecture content. Instead of a one hour lecture, there are four mini-lectures with three intervals of short duration which may be student interaction, a quiz, a written assignment, or an opportunity to interact with other students in some format. Williamson & Schell demonstrated in multiple studies how this method helped to hold students' attention. Ruhl & Suritsky, indicated students who were instructed using the pause procedure, two minute pauses every twelve to eighteen minutes during the lecture, could recall more facts, vocabulary and ideas from lectures immediately following instruction than students presented with an entire lecture at once. They also outperformed the other group on an exam given one week later.

Providing individualized training to help students improve concentration skills should be implemented. For example, one-on-one training utilizing q-bank questions may be beneficial. When a student reaches the point that his/her attention is about to wane, the instructor could encourage him/her to do five more questions and/or spend five more minutes on the question answering task. After doing several sessions utilizing this practice, the student will likely extend his/her concentration time and will also begin to practice this strategy to increase concentration time (Courtney *et al*, 2014).

CONCLUSSIONS

A qualitative study might be held latter for identify the real reason that may cause the significantly increase passing score of OSCE UKMPPD on School of Medicine UMY.

REFFERENCES

General Medical Council. 2015. "How Are Students Assessed at Medical Schools across the UK?" https://www.gmc-uk.org/Assesment_audit_report_FINAL_pdf.pdf_59752384.pdf.

Puspa dewi, Natalia, and Elisabeth Rukmini.n.d. 2016. "Implementasi Dan Evaluasi Modul Pembelajaran Ilmu Pendidikan Kedokteran Untuk Mahasiswa Kedokteran Tahap Preklinik."

- Jurnal Pendidikan Kedokteran Indonesia; The Indonesian Journal of Medical Education 5 (1):15–21.
- Susan Fidment 2012. "The Objective Structured Clinical Exam (Osce): A Qualitative Study Exploring The Healthcare Student's Experience". Student Engagement and experience Journal Volume 1, Issue 1. ISSN (online) 2047-9476.
- Hamed Al Sinawi, Marwan Al Sharbari, Yousif Obaid, Nonna Viernes. 2012. "Preparing And Conducting Objective Structured Clinical Examination For Oman Medical Specialty Board R1-R4 Residents". *Oman Medical Journal Vol.27*, *No 3:246-248*.
- Courtney West, Terri Kurz, Sherry Smith, and Lori Graham. 2014. "Are Study Strategies Related To Medical Licensing Exam Performance". *Int.J Med Educ*; 5: 199 2014. Published online 2014 Nov 2 doi: 10.5116/ijme.5439 6491.
- Amer Al Saif and Samira Alsemany. 2013. "The objective structured clinical exam (OSCE): a qualitative study exploring physical therapy student's experience". *Journal of American Science*; 9 (6)
- Rano Mal Piryani, Ravi P Shankar, et al. 2013. "Conducting Integrated Objective Structured Clinical Examination: Experience At Kist Medical College, Nepal". *Medical Education Volume 1; Issue 2; Page: 166-170.*
- Konsil Kedokteran Indonesia, Standar Kompetensi Dokter Indonesia. Second edition. Jakarta: Konsil Kedokteran Indonesia; 2012.