

OVERVIEW OF EDUCATION ENVIRONMENT AND OSCE GRADUATION OF FIFTH SEMESTER IN MEDICAL FACULTY UDAYANA UNIVERSITY

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Abstract: Students' overview of education environment is essential in order to achieve the sole purpose of the study. The educational environment is the implication of learning environment or academic atmosphere experienced by a student in implementing curriculum. OSCE has been widely used as an assessment tool to test the minimum standards received from students while studying in the medical faculty. In order to achieve the maximum score of OSCE, a medical university made an entire a simulation based on clinical practice called basic clinical skill. Basic clinical skills (BCS) become a learning process tool that combines aspects of knowledge, skills, and attitudes in clinical practice, and supports OSCE learning. This study aims to determine the differences in the fifth semester of OSCE graduation for 2015/2016 and 2016/2017 students at the Faculty of Medicine, Udayana University. This study uses the DREEM questionnaire to see students' perceptions of education environment in FK Unud. Samples were taken using the hypothesis test formula of the proportion of two populations. The research results were processed with SPSS through the Pearson correlation test. The results showed that education environment had no relationship with OSCE graduation in 2015/2016 and 2016/2017 ($p < 0.01$). This study can provide an overview of the results of the OSCE graduation, in two different strengths at the Faculty of Medicine, Udayana University.

Keywords: education environment, OSCE, OSCE graduation, DREEM.

I. INTRODUCTION

The educational environment is the implication where the learning environment or academic atmosphere experienced by a student in implementing a curriculum (Rothman & Ayoade, 2015). According to Hussain et al. (2014), the curriculum is described as six partial and interrelated pairs, where the curriculum is said to be structure, curriculum as a process, curriculum as content, curriculum as teaching, curriculum as learning and curriculum as activities. In the implementation of the curriculum, especially in medical education, there are several stages including students learning the material received when conducting lectures, implementing course material in the form of clinical basic skills training, and testing clinical knowledge and skills with a series of examinations called objective structured clinical examination (OSCE).

Basic clinical skills training or commonly called basic clinical skills has been received by students of the Faculty of Medicine of Udayana University since the first year of lecture. Basic clinical skills are a means of the learning process that combines aspects of knowledge, skills and attitudes in clinical practice. The provision of basic clinical skills training aims to bridge the courses received by students in the classroom with the clinical situation that will be received when handling patients as clinical partnership students. With basic clinical skills training provided from the start, students will be more familiar with the clinical situation. In addition, this can increase student interest in learning and provide more preparation to undergo a period of clinical partnership or the so-called co-ass. The material provided in clinical basic skills training is guided by SKDI (KKI, 2012).

Objective Structured Clinical Examination (OSCE) was first developed by Harden in 1975. OSCE itself is a standardized test that is assessed based on objective principles where participants will be tested in a series of stations measured by time for the assessment of professional performance in a simulated environment. In each station, participants will be assessed by trained examiners. The existence of OSCE itself is an approach in student assessment that is used to measure the ability of clinical skills with the aim of producing medical doctor graduates who have clinical competence, in accordance with the Indonesian Medical Council (2012), which is the competency of general practitioners who are able to make comprehensive and comprehensive diagnoses and therapies and provide education. to patients. In its implementation, OSCE assesses the ability of students in clinical reasoning, clinical skills, communication, patient management, attitudes, and ethics where these aspects are important fundamentals that are needed before undergoing clinical partnership.

A study said that students who received basic clinical skills training were able to carry out OSCE better than those who did not receive basic clinical skills training (Junger, 2005). In conducting basic clinical skills training, students are conditioned to be more familiar with clinical situations. In addition, in each exercise, students will get feedback during the practice. Providing feedback can increase students' interest in learning basic clinical skills training.

In implementing basic clinical skills, the class of 2015/2016 has a different system from the class of 2016/2017. In the 2015/2016 class, the implementation of basic clinical skills was carried out at the end of the semester, exactly 1 week before taking the final exam block, with a duration of 1 hour of BCS material delivery and 2.5 hours of BCS training. In the basic clinical skill system that applies, the BCS material is provided during lectures with a duration of 1 hour, then BCS training is held on the second day after lecture, with a duration of 3 hours. According to Medical School Udayana University Study Program Coordinator the purpose of the existence of differences in the BCS system is to use the time allocated by maximizing study time being longer. The BCS material provided makes lectures more solid so students are expected to be able to practice routinely and comprehensively so that the learning delivered can be easily understood.

II. METHOD

This research was conducted using a cross-sectional analytic approach, using the Pearson product correlation test

III. RESULT

A. Characteristics of Respondents

Researchers involved 71 female student respondents or 57.3% and 57 male student respondents or 42.7%. In addition, the questionnaire was given to 2 batches. The frequency table is attached as follows.

TABLE 1: Frequency Table Based On Gender

	Frequency	%
Male	53	42.7
Female	71	57.3
Total	124	100

B. Education Environment in Udayana University

This section will explain the results of the assessment of each domain between two batches.

TABLE 2: Domain Total Score

Domain	2015/2016	2016/2017
Students perception of learning (SPL)	31.7	31.6
Students perception of teachers (SPT)	26.7	26.6
Students academic self perception (SASP)	22.9	22
Students perception of atmosphere (SPA)	31.2	30
Students social self perception (SSSP)	17.8	16.8
Total	130.3	127

Based on table 2, it is described that the domain scores is 130.3 for the batch 2015/2016 and 127 for the batch 2016/2017. Between the two batches, the difference in scores obtained ranges from 0.1 to 1. Both results can be categorized as moving in a positive direction. In the SPL table, the total score obtained in batch 2015/2016 is 31.7 and the total score obtained in batch 2016/2017 is 31.6 out of the total maximum score of 48. These results indicate that students' perceptions

of BCS learning at Medical School of Udayana University, have a positive approach. In the SPT table, the average score obtained in batch 2015/2016 is 26.7 and batch 2016/2017 is 26.6 with a maximum score of 44. These results indicate that the perception of medical students towards teaching lecturers is likely to be positive. In the SASP table, the total domain score obtained for the batch 2015/2016 is 22.9 while the batch 2016/2017 class it gets a score of 22 from a maximum score of 32. These results can be categorized, that medical students' perceptions of academics are on the more positive side. In the SPA table, the total domain score obtained by batch 2015/2016 is 31.2 while batch 2016/2017 is 30 out of a total score of 48. It can be said that the atmosphere of BCS learning experienced by medical students tends to be positive. In the SSSP table, the total score obtained by the batch 2015/2016 is 17.8 while in the batch 2016/2017 is 16.8 out of the total score of 28. This shows that students' perceptions of their social life tend to be good. The individual score of each domain will be listed below.

TABLE 3: Individual Score of SPL

Number	Question	2015/2016	2016/2017
1	I am encouraged to participate during teaching sessions	2.9	2.9
7	The teaching is often stimulating	2.6	2.5
13	The teaching is student centred	2.7	3.1
16	The teaching helps develop my competence	3	3.1
20	The teaching is well focused	3.1	3
21	The teaching helps to develop my confidence	3	2.9
24	The teaching time is put to good use	2.8	2.7
25	The teaching over emphasizes factual learning	2.5	2.3
38	I am clear about the learning objectives of the course	1.2	3
44	The teaching encourages me to be an active learner	2.7	2.6
47	Long term learning is emphasized over short term learning	3	2.4
48	The teaching is too teacher centred	2.2	1.7

In the 2015/2016 batch SPL domain, the item with the highest score obtained are number 20 and 16. with a statement the teaching is well focused. On the contrary, the lowest score was obtained at number 1.2 in the batch 2015/2016 with statement number 38 In the batch 2016/2017 SPL domain, the item with the highest score are statement number 13 and 16 whereas the lowest score is statement number 48.

TABLE 4: Individual Score of SPT

Number	Question	2015/2016	2016/2017
2	The teachers are knowledgeable	3.3	3.2
6	The teachers espouse a patient-centred approach to consulting	2.7	2.4
8	The teachers ridicule the students	0.7	0.8
9	The teachers are authoritarian	0.9	1.1
18	The teachers have good communication skills with patients	3	3
29	The teachers are good at providing feedback	2.9	2.9
32	The teachers provide constructive criticism here	3	2.7
37	The teachers give clear examples	2.9	2.9
39	The teachers get angry in teaching sessions	1.2	1.5
40	The teachers are well prepared for their teaching sessions	2.9	2.9
49	The students irritate the teachers	2.5	1.6

Both batches have the same highest score which was achieved by statement number 2 with 3.3 score for batch 2015/2016 and 3.2 score for batch 2016/2017. The lowest score was statement number 8 for both batches.

TABLE 5: Individual Score of SASP

Number	Question	2015/2016	2016/2017
5	Learning strategies that worked for me before continue to work for me now	3	2.6
10	I am confident about passing this year	3.3	3.1
22	I feel I am being well prepared for my profession	3	2.9
26	Last year's work has been good preparation for this year's work	3	2.8
27	I am able to memorise all I need	2.4	2.1
31	I have learnt a lot about empathy in my profession	2.4	2.4
41	My problem solving skills are being developed here	2.9	3
45	Much of what I have to learn seems relevant to a career in healthcare	2.9	3.1

In batch 2015/2016, the highest score was described as statement number 10 with average of 3.3 whereas the lowest score are statement number 27 and 31. In batch 2016/2017, the highest score was statement number 10 with average score of 3.1. If batch 2015/2016 has two statements that has lowest score, batch 2016/2017 has 1 statement that has the lowest score that is number 27.

TABLE 6: Individual Score of SPA

Number	Question	2015/2016	2016/2017
11	The atmosphere is relaxed during ward teaching	2.9	2.7
12	This college is well time tabled	2.4	2.2
17	Cheating is a problem in this college	2.5	2.6
23	The atmosphere is relaxed during lectures	2.9	2.8
30	There are opportunities for me to develop interpersonal skills	3	3
33	I feel comfortable in class socially	3	2.8
34	The atmosphere is relaxed during class/seminars/tutorials	1.9	1.8
35	I find the experience disappointing	1.6	2.8
36	I am able to concentrate well	2.8	2.9
42	The enjoyment outweighs the stress of the course	3	2.5
43	The atmosphere encourages me as a learner	2.7	2.3
50	I feel able to ask the questions I want	3.2	3.2

In both batches, the highest score was achieved by statement number 50 with average score of 3.2. However, the lowest score obtained in batch 2015/2016 was statement number 35 whereas for batch 2016/2017, the lowest score was 1.8 with statemnt number 34.

TABLE 7: Individual Score of SSSP

Number	Question	2015/2016	2016/2017
3	There is a good support system for students who get stressed	1.8	1.8
4	I am too tired to enjoy the course	2	2
14	I am rarely bored in this course	2.1	2.1
15	I have good friends in this course	3.4	3.3
19	My social life is good	3.2	3.2
28	I seldom feel lonely	2.8	2.4
46	My accomodation is pleasant	2.5	2

This domain, both batches have similar score for each statement. The highest number was obtained by statement number 15 with avergae of score are 3.4 and 3.3. The lowest score, was obtained by number 4 with average of score is 2.

C. OSCE Results for Batch 2015/2016 dan Batch 2016/2017

In the second generation, the stations tested were 4 stations namely Neurology, Respiratory, Skin and ENT. The researcher determines the cut-off on the OSCE results which have a value of ≥ 65 as passed and a value of <65 as not passing. The researcher did not analyze the relationship between OSCE graduation at each station on schedule changes. From the questionnaire data sampling and the retrieval of OSCE value for semester V in 2015/2016 and 2016/2017, the following data were obtained.

TABLE 8: Frequency Distributions of OSCE Graduation of Batch 2015/2016

	Frequency	%
Didn't pass	30	48.4
Passed	32	51.5
Total	62	100

TABLE 9: Frequency Distributions of OSCE Graduation of Batch 2016/2017

	Frequency	%
Didn't pass	12	19.3
Passed	50	80.7
Total	62	100

This research was tested by Pearson-product to find the correlation between the education environment and OSCE graduation. Correlation can be seen from the P-value with a significance of 0.01. The table states that, the value of the OSCE results <0.01 , then the data, in this case the DREEM Questionnaire and OSCE graduation in batch 2015/2016, are related. However, if $p\text{-value} > 0.01$, then the data are not related. In this case, the results of the questionnaire do not have a relationship with the results of the 2015/2016 OSCE graduation.

TABLE 10: Pearson-product Result for Batch 2015/2016

	p-value
SPL	.111
SPT	.050
SASP	.075
SPA	.212
SSSP	.032

TABLE 11: Pearson-product Result for Batch 2016/2017

	p-value
SPL	.005
SPT	.099
SASP	.012
SPA	.029
SSSP	.028

IV. DISCUSSION

In this study, the Pearson correlation test was performed on each batch and significance was obtained at 0.01. Based on the results of the correlation test conducted in batch 2015/2016, the results comparing the domains of learning, teachers, academic self-perception, social self-perceptions, and atmosphere, had no relationship with the graduation of the batch 2015/2016 fifth semester OSCE. In addition, the Pearson correlation test conducted in batch 2016/2017, the results obtained were the domains of learning, teachers, academic self-perception, social self-perception, and atmosphere, which did not have a relationship with the OSCE graduation in fifth semester batch 2016/2017.

In batch 2015/2016, the percentage of OSCE graduation was 51.6% while in 2016/2017, OSCE graduation was 80.6%. From the results of the OSCE graduation, the 2016/2017 class got a higher percentage of graduation than the 2015/2016 class. OSCE graduation can be reviewed influenced by several factors including the level of anxiety students face during the OSCE exam, the effect of feedback given by lecturers to students, and the competence of teaching faculty as professional teaching staff.

According to a study conducted at the University of Muhammadiyah North Sumatra, giving feedback to students about OSCE training (in this case basic clinical skills), is able to improve clinical skills in the medical students of the Muhammadiyah University of North Sumatra (Academic Guide of FK UMSU, 2016-2017). Anxiety is also a factor that affects OSCE. This is in accordance with research conducted by Furlong et al (2005) that the atmosphere during the OSCE exam can cause students to experience stress. Harden (2017) mentions in his book that teaching lecturers are the biggest assets owned by a medical faculty.

The weakness of this study is that the researcher did not discuss the specifics of each station tested against OSCE graduation. Researchers only looked at the overall results of the OSCE graduation from both the 2015/2016 and 2016/2017 batches. This study only answers the effect of exposure on outcomes after schedule changes. In addition, he did not specifically examine the factors that influence OSCE graduation in each class such as learning time when preparing OSCE

V. CONCLUSION

Based on the results and discussion of this study it can be concluded that the educational environment does not have a relationship to OSCE graduation either in the 2015/2016 and 2016/2017 classes.

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