QUALITY AND EFFICIENCY IMPROVEMENT OF PROFESSIONAL MEDICAL DOCTOR EDUCATION IN PUBLIC HEALTH FIELD USING OBJECTIVE STRUCTURED PUBLIC HEALTH EXAMINATION (OSPHE) APPROACH AT FACULTY OF MEDICINE

by Budi Utomo .

Submission date: 05-Jan-2022 11:45AM (UTC+0700)
Submission ID: 1737632552
File name: TY_AND_EFFICIENCY_IMPROVEMENT_OF_PROFESSIONAL_MEDICAL_DOCTOR.pdf (212.33K)
Word count: 5182
Character count: 27069

Folia Medica Indonesiana Vol. 47 No. 4 October - December 2011 : 240-247

QUALITY AND EFFICIENCY IMPROVEMENT OF PROFESSIONAL MEDICAL DOCTOR EDUCATION IN PUBLIC HEALTH FIELD USING OBJECTIVE STRUCTURED PUBLIC HEALTH EXAMINATION (OSPHE) APPROACH AT FACULTY OF MEDICINE AIRLANGGA UNIVERSITY

Budi Utomo, Djohar Noeswantoro, Widati Fatmaningrum
Department of Public Health and Preventive Medicine
Faculty of Medicine, Airlangga University, Surabaya

ABSTRAK

Masalah utama tes konvensional mahasiswa kedokteran di Departemen Kesehatan Masyarakat adalah kurangnya standarisasi bahan data kesehatan masyarakat yang digunakan, ruang lingkup mata kuliah kesehatan masyarakat, dan variabilitas antara pemeriksa. OSPHE disusun dengan pertanyaan yang sama untuk setiap siswa, lebih sedikit variabilitas penguji, dan sistem penilaian merujuk pada kriteria khusus dan standar. Oleh karena itu, diharapkan variabilitas dalam penilaian kuliah bisa dikurangi dan setiap siswa menjalani tes yang obyektif dan terstruktur. Tujuan utama penelitian ini adalah mengembangkan model OSPHE yang paling tepat, dan manajemen OSPHE untuk mahasiswa senior yang meliputi mekanisme dan langkah-langkah penting dalam pelaksanaannya di Departemen Ilmu Kesehatan Masyarakat dan Kedokteran Pencegahan Fakultas Kedokteran Universitas Airlangga. Metode penelitian yang digunakan adalah penelitian tindakan. Metode ini memerlukan beberapa langkah: 1) penyebaran informasi OSPHE dan perencanaan evaluasi OSPHE, 2) Pengembangan model OSPHE, 3) Pelaksanaan OSPHE, 4) Evaluasi hasil OSPHE, 5) Revisi model OSPHE, dan 6) Penerapan model OSPHE. Hasil penelitian menunjukkan bahwa, ujian Ilmu Kesehatan Masyarakat yang menggunakan model ini memiliki 'status' sama kuat dibandingkan dengan yang konvensional dan dapat digunakan sebagai pengganti model konvensional. Departemen Ilmu Kesehatan Masyarakat dan Pencegahan Fakultas Kedokteran Universitas Airlangga dapat menerapkan model OSPHE ini. Seperti yang disarankan dalam penelitian ini, pelaksanaan OSPHE memerlukan peningkatan pengetahuan, wawasan, dan keterampilan dosen di Departemen IKM-KP dalam pengelolaan model OSPHE yang dapat diperoleh melalui program OSPHE di berbagai pelatihan/workshop, nasional dan internasional.

ABSTRACT

The main problems of the conventional test of medical doctor students at public health department are lack of standardization of materials community health data used, scope of public health subjects, and variability among examiners. The OSPHE was structured to have identical questions for every student, less variability of the examiners, and assessment system which could refer to specific and standardized criteria. Therefore, there will hopefully be less variability in lecture assessment and every student obtains objective and structured examination. The main objective of this research is to develop the most appropriate OSPHE model, and the OSPHE management for Clinical Posting Senior students which include mechanisms and several important steps in its implementation at the Public Health and Preventive Medicine Department Faculty of Medicine Airlangga University. The research method used is action research. The method requires several steps: 1) OSPHE information dissemination and OSPHE evaluation planning, 2) Development of OSPHE model, 3) Implementation of OSPHE, 4) Evaluation of the OSPHE results, 5) Revision of OSPHE model, and 6) Application of the OSPHE model. The research results suggest that, Public Health exam using this model has a 'status' equally strong compared to the conventional one and could be used as a substitute for the conventional model. Clinical Posting Senior exam at the Public Health and Preventive Department Medical Faculty Airlangga University can implement the OSPHE model. As suggested in this study, the OSPHE implementation required the increase of knowledge, insight, and skills of lecturers at the Department of IKM-KP in the management of OSPHE model which could be gained through various training OSPHE courses/ workshops, nationally and internationally

Keyword: *improvement, OSCE, OSPHE model, Public health exam*

Correspondence: Budi Utomo, Department of Public Health and Preventive Medicine, Faculty of Medicine, Airlangga University, Surabaya

INTRODUCTION

At this time highly varied quality of medical education grad, because the reference that are used, only in form of reference books, not have the shape of curriculum. The variety in the quality of graduate medical education in Indonesia can cause problems in medical practice for the community. Referring to this condition needed a national standard education of doctor profession in Indonesia that cover standard input, process and output as well as the global educational standard. These are give quality assurance of education, including quality

assessment of education for prospective doctors in medical school.

Stages of medical education at the Faculty of Medicine, Airlangga University are generally divided into two: First, the stage of basic medical education that end with a local doctor's degree (academic education and Clinical Posting Senior) at the Faculty of Medicine. Second, internship or job training phase in order to update and sharpening competence has been achieved as a new doctor. Expected result is a doctor of primary service that can apply family medical approach to improve public health status, based on medical science and adequate basic skills.

The Objective Structured Clinical Examination (OSCE) was developed to address the problems associated with conventional clinical examination according to standard operating procedures (SOPs) of educational hospitals. The main issues arising are lack of standardization of the conventional exam test used clinic, narrowness of scope, and the variation between examiners. The OSCE was made in such a way that all students doing exam questions are identical and very similar, the same examiner and assessment system that refers to specific criteria and standardized, so there are no variation in assessment of examiner. In this way, all students get the tests and structured with a clear objective (fair). Any difference in test scores between the students reflects differences in ability or competence assignment, not in terms of clinical material variability exam or examiners bias (McClusky, 2004)

Competencies expected after the student Clinical Senior Posts in the Department of Public Health and Preventive Medicine was that the students are expected to have skills that are adequate basic medical sciences in primary care to apply family medicine and community approach, which were translated into specific competencies as follows: Having the ability to communicate effectively with patients and their families, among peers, inter professions or institutions and the public; Have the ability to perform measurement and determinants of public health; able to formulate an alternative solution based on the findings of public health issues; have skills in providing primary medical services; having the ability to manage medical and health care systems; able to carry out field research in medicine and community health

Objectives

The main objective of this research is to develop a model OSPHE the most appropriate for the management of professional exams for young doctors CPS. It also improves understanding of policy, the basic philosophy, principles and OSPHE procedures, makes adjustments to situations and conditions (simulated) clinical exam problems in public health issues, as a basis for preparing Public Health exam within OSPHE format, and makes a checklist guideline for lecturers in the format OSPHE testers, which includes knowledge, skills to resolve public health issues. By so doing, we can generate CPS student assessment standards for Public Health and Preventive Medicine using OSPHE model that can be updated at any time necessary. OSPHE model can stimulate the team of lecturers, the existence of a quality exam process, comprehensive, and consistent with the level of competence. All students have exam questions with the same level of difficulty, a standardized assessment system. The difference in test result reflects their ability /competence

MATERIALS AND METHODS

The research method used was action research. Primary data collection as a material for preparing OSPHE are lectures to provide a complete understanding of the research to respondents about OSPHE, and discussion at a special session (session IV), to discuss various obstacles in the management of OSPHE.

The steps for problem modeling OSPHE are as follows: First, OSCE policies is implemented within the clinical department of the Faculty of Medicine Unair, the OSCE format, format of a checklist for the examiner, systematic approach to OSCE station and discussion in small groups were performed with (a) practice writing questions in the format OSPHE, obstacles in the completion of materials and test material at OSPHE IKM-KP, (b) simulation for public health problems as a test case OSPHE. Discussions will be developed in order to same perception among faculty examiners in the Department of IKM-KP. Workshops on determination components of Public Health Competency (UKDI) that will be tested have been held in Sidoarjo, dated July 26, 2011 for a full day to determine components of Public Health Competency to be tested, including list of public health issues/community (KKI-2006), health services, environment, health care organizations, medical errors, nosocomial infections, medical negligence, unexpected events, patient safety, and lists of clinical skills.

For capability level 4, the followings were tested: Prevention (vaccination policy included), recognition of hazardous behaviour and life style, performing directed medical examination, assessment of absent due to illness, performance of environmental research, performance of several interventions in the domain of primary, secondary and tertiary prevention like

vaccination, periodical medical examination, social medical support and management, prevention of accident and set up a program/plan for individuals, their environment or an institution.

The research was done within 7 months, from May to November 2011, at the Faculty of Medicine Unair. Respondents comprised the review team/Evaluator Accreditation Unair FK and lecturer team of the Department of IKM-KP FK Unair. The research was funded by Research Project Grant HPEQ Component 2 of 2011, pursuant to a Decree No. 381/D2-HPEQ/SM4.11.

RESULTS AND DISCUSSION

Overview of Learning Implementation at FK Unair

Medical education in the curriculum FK Unair using hybrid or combination, a combination of lecture curriculum materials based disciplines by integrated lecture with theme and systems. Module integration with the strategy of problem based learning (PBL) and the laboratory medical skills (skills lab) has been applied since 2000. In the era before 2005, the curriculum refers to KIPDI I and II are still KIPDI disciplines book-based and the KBK since 2005, enforced in accordance with national agreements. Implementation of the implementation of competency-based curriculum was started in 2005, based on guidelines KIPDI III: physician education to 4.5 years, which will be increased by 1 year as clerkship students (DP 01.05: Dean's Decree No. FK Unair 895/JO3.1.17/PP/2006). Within this curriculum more widely applied learning methods-medical skill PBL, learning modules, vertical and horizontal integration

Description of Teaching in Public Health and Preventive Medicine on Professional Level at the Faculty of Medicine Airlangga University (DMCPS CBC)

Implementation of educational graduate programs in FK UNAIR has performed the integration both horizontally and vertically before the KBK used officially. Stages of medical teaching at the Medical Faculty Unair divided into two: 1) Basic medical education that end with a local doctor's title (academic education and Clinical Posts) at the Faculty of Medicine. 2) Internship or job training in order to update the competencies have been achieved as a new doctor, in order to obtain a certificate of competence and conduct primary care services (performed by association on medical profession/ IDI).

During clinical senior posts (CPS) at the Department of Public Health-Preventive Medicine within five weeks, the CPS group called batch groups, consisting of 24 students. In one batch of the CPS group was divided into 6 groups, which consist of four to six CPS students. In one group of CPS is divided into small groups consisting of two to three students in particular assistance by a person lecturer in Public Health Sciences at least twice a week with time according to agreement. CPS Students also gain experience of learning through the methods: 1). Supervising group, 2). Active participation in all CPS activities, 3). Literature browsing, 3). Management data training into information with the latest information technology, 4). Guidance on the issue, 5). Presentation (reporting visits to institutions, seminars and research proposals and 6). Report writing (visits to agencies and research). At the end of the CPS, students are expected to have skills that are reliable basic medical sciences in primary care to apply family medicine and community approach research activity that has been conducted

Research activity that has been conducted was socialization and making OSPHE exam. Socialization OSPHE have been carried out against all the lecturers because they eventually will make about OSPHE. The socialization is: description about OSPHE approach, list of problem OSPHE examination, explanation of the action research and research activities. We developed a model test OSCE in Public Health Department (OSPHE). OSPHE exams are designed in this study is to replace the conventional final exam period of employment CPS students. This conventional final exam usually conducted by 1) giving a written case to the CPS who answered in writing, 2). The case tested must be associated with community health problems who solved analytically in terms of health sciences community, 3). Data/information presented in the case of the tested provided as complete as possible, 4). After a written test, followed by examination oral, and 5). A team of examiners, which consisted of two lecturer with different skills, doing exams at the same time.

The model proposed in the Public Health department of the OSCE for OSPHE is basically no fundamental difference with the preparation of the OSCE to the clinical department. Model that applied in compilation OSPHE in the preparation OSPHE at the Department of IKM-KP FK UNAIR include the usage of setting pass standard: Smooth OSPHE implementation requires careful planning, including determination of the cases, weighting of components to be tested, and determine the minimum pass test score (NBL). The scoring system uses the system font, which is the conversion of raw score standardization in accordance with Unair Rector's

Decree No.. 2994/JO3/PP/2003 on "Tata Cara Penilaian Hasil Belajar Mahasiswa Unair"

Table 1. Scores passing grade FK Unair

Skor	Nilai Huruf	Bobot
≥ 75	A	4,0
70,0 – 74,9	AB	3,5
65,0 – 69,9	B	3,0
60,0 – 64,9	BC	2,5
55,0 – 59,9	C	2,0
40,0 – 54,9	D	1,0
< 40,0	E	0,0

Passing grade for a minimum professional level is 65 (B). Assessment/special supervision of CPS Students on cognitive ability, psychomotor and affective during study at the Department of IKM-KP performed periodically. IKM-KP department has 22 active lecturers, with two professors, distributed in five expert sections. These are: Epidemiology (4), Biostatistics (4), Nutrition (4), Environment & Occupational Health (4) and Health Administration & Public Policy (6). The team has selected based on their expertise to each station. Provision of reserve examiners provided to avoid unable to attend from examiner that has been scheduled.

OSPHE Implementation in the Department IKM-KP

Final exams OSPHE model implemented on a Tuesday or Wednesday of each week to the fifth week of DM CPS in Department of IKM-KP. This trials have been carried out on 24 young doctor (DM CPS) for two times, as a pre-test and post-test. The results are used as consideration for comparison with the conventional exam that still performed today. After all the implementation procedures are prepared: the team of examiners, the components of competence (made check list), and the number competencies that will be traversed by the OSPHE participants, examinees were told their implementation procedures. The trial has been conducted using 10 stations with 5-7 competencies and 10 lecturers testing, each station need 10-15 minutes. DM CPS students take a test that has been available, either in the form of settlement of the case/theoretical as well as skills in the community field in each station, from first to last (between 10-15 cases). They need approximately 10-15 minutes for each question in station, so it takes about 100 to 150 minutes for one cycle OSPHE exam.

Exam results

OSPHE exam applications model has been tested twice, in the model pre-test and post-test which was held on the first day and last for DM-2007 class CPS bacth 12 September to 14 October 2011. The results of test scores showed in table 2, 3 and 4.

Table 2. Result summary OSPHE pre-test scores

NO	EPID	BIOSTAT	GIZI	AKM	KLKK	MEAN
1	20	15	25	45	25	26
2	25	20	30	35	10	24
3	20	25	40	55	75	43
4	35	30	50	40	10	33
5	10	10	10	30	10	14
6	15	20	60	20	10	25
7	10	15	40	45	10	24
8	50	30	20	55	40	39
9	60	30	75	60	30	51
10	30	25	50	50	45	40
11	10	10	20	15	40	19
12	15	25	75	30	10	31
13	20	40	50	65	70	49
14	15	25	65	30	35	34
15	40	15	35	15	90	39
16	35	35	40	55	25	38
17	15	10	25	70	45	33
18	45	10	45	65	15	36
19	10	25	30	25	30	24
20	10	20	45	35	35	29
21	20	35	75	45	70	49
22	35	15	20	50	50	34
23	50	20	25	50	35	36
24	10	10	10	25	30	17
n	25,21	21,46	40	42,08	35,21	32,79

Table 2. above illustrates the distribution of pre-test scores DM IKM CPS in the IKM-KP department FK Unair based group field tested. Pre-test scores obtained from the implementation OSPHE exam held on the first day for DM CPS in the department. The case in question involves all courses that they get in previous semester, with emphasis on applications in all fields or sections in IKM-KP. The disciplines include Epidemiology, Biostatistics, Nutrition, Environment & Occupational Health and Health Administration & Public Policy. Final test score obtained from the average scores test of the five fields of these sections.

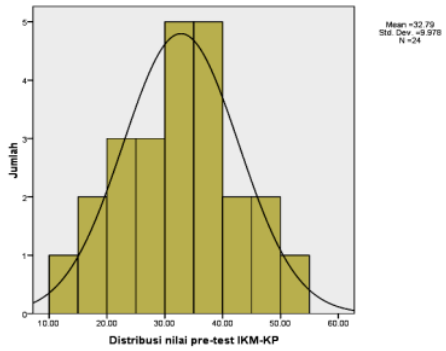

Figure 1. Distribution of the DM-CPS pre-test scores with OSPHE

IKM-KP passing grade score set a minimum of 65, referring to this standard all these students did not pass the exam, because average scores of only 32.79, normally distributed (p = 0.998). The highest score was 51, while the lowest 14. This may be understandable, because the pre test exam take on the first day in Public Health department; still a lot of them are forgotten and not prepared with the course asked in the exam.

There are some students who did not pass, because the achievement of its average scores under 65. Achievement of the overall average score was 68.50. Table 3 describes the distribution of post-test value-KP DM IKM CPS in the Department of Public Health and Preventive Medicine Faculty of Medicine Airlangga University based group field tested. Post-test values obtained from the implementation OSPHE exam held on the last day for DM CPS in this department. Post-test scores of IKM-KP whole, obtained from the average value of the five fields of the science section. IKM-KP passing score is set a minimum 65, when referring to this standard then there are some students who did not pass, because the achievement of its average scores under 65. Achievement of the overall average scores was 68.50 (get B = 65-69).

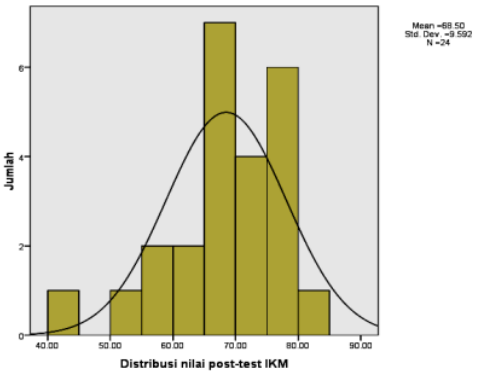

Figure 2. Distribution of the DM-CPS post-test scores with OSPHE

Table 4 gives the average scores value of IKM with OSPHE overall post-test gives good results, amounting to 68.50, although there are some students who did not pass. The range of score values they are in a minimum value of 41.00 and a maximum of 83 with a SD of 9.59. The lowest score values contained in the field of epidemiology, with an average of 49.79 and 54.46 for biostatistics. Distribution of this score value at a time can be used to evaluate candidates for the achievement of the scores obtained by the student, whether because it is too easy or difficult, considering the time needed to finish it.

Table 5 illustrates that, on average achievement of the pre-test, post-test and exam results of conventional exam DM-CPS (a written test followed by discussion with the two examiners). The post-test results are quite encouraging, there is a significant improvement result (p = 0.000) when compared with the average scores value achieved in the pre-test exam. Meanwhile, when the results of post test scores value is compared with the conventional CPS exam-DM, no significant difference (p = 0.924). This suggests that, Public Health exam using OSPHE model, has a 'status' is equally strong when the exam will be used as a substitute for the conventional exam for DM CPS.

Model tests with OSPHE have many advantages, when compared with conventional models. The advantages are among others, more objective, all students have completed the same exam, the same examiner and assessment system that refer to specific criteria and standardized, so there are no variation in examiners. The exam topics or cases are dynamic, in addition to physicians referring on the competency test for doctor in Indonesia (UKDI), also relied on public health priority that arise local or globally.

Table 3. Result summary OSPHE post-test scores

NO	EPID	BIOSTAT	GIZI	AKM	KLKK	RATA-RATA	UJIAN KONVEN
1	60	55	90	60	75	68	70
2	35	65	100	70	50	64	69
3	50	35	100	60	100	69	71
4	55	70	100	90	100	83	70
5	50	20	50	40	100	52	55
6	50	70	100	70	100	78	65
7	30	70	100	70	100	74	68
8	70	50	100	90	85	79	65
9	45	70	100	80	80	75	70
10	50	50	100	55	75	66	68
11	40	55	70	60	70	59	65
12	45	90	90	70	100	79	70
13	50	65	90	80	100	77	68
14	50	70	90	75	100	77	75
15	60	55	65	55	100	67	70
16	50	40	95	45	100	66	80
17	35	50	60	70	75	58	70
18	40	70	80	75	60	65	67
19	40	50	70	50	100	62	67
20	55	55	100	80	75	73	70
21	60	70	80	70	75	71	70
22	65	50	80	65	75	67	68
23	70	60	75	80	85	74	68
24	40	20	30	30	85	41	60
	49,79	56,46	83,958	66,25	86,04	68,50	68,29

Table 4. Distribution of the average post-test IKMI-KP with OSPHE

	EPIDPOST	*BIOSTATPOST*	*GIZIPOST*	*AKMPOST*	*KLKKPOST*	*IKMPOST*
N Students amount	24	24	24	24	24	24
Mean	49,79	56,46	83,96	66,25	86,04	68,50
Std. Deviation	10,78	16,38	18,76	15,05	14,96	9,59
Variance	116,26	268,43	352,13	226,63	223,87	92,00
Range	40,00	70,00	70,00	60,00	50,00	42,00
Minimum	30,00	20,00	30,00	30,00	50,00	41,00
Maximum	70,00	90,00	100,00	90,00	100,00	83,00

The questions must either comply with certain covenants 1) must be efficient (parsimony) 2) Raw (standardize) 3) has norm 4) objective 5) is valid and 6) reliable (reliably). Problems that meet these requirements, then need to be analyzed. Conclusions made from analysis of the exam questions must be valid, have good difficulty index or excellent difference. Questions that did not match will be removed; we must have the exam question bank

Types of problems exam for OSPHE

The problems in this exam are a number of questions to be answered, or a number of statements that must be addressed, or set of tasks to be performed in order to obtain specific information about all public health aspects by students. Descriptively, the developments of types of OSPHE problems conducted by lecturers in this research are as follows: description form (70%), objective form (15%), and the combination of description and objective (15%).

This all new exam, because there are no colleges that conduct like this. All problems that examined have been assessed that cover some aspects are reviewed on an explanation test and some aspects that assessed at objective test. The aspects that reviewed on explanation test are compatibility of problem item with interest, clarity of questions and answers that are expected, the accuracy of said question/command, clarity of instructions about how to work, clarity of guidelines for scoring and clarity of the graph/table/images/maps that accompany the problem. Some aspects that assessed at objective test are compatibility of problem item with interest, trhe accuracy of the alternative correct answers, linkage of distractor with the subject exam, clarity about the basic formulations, clarity formulation of the answer choices, all well-balanced answer choices, independence between problem item one with other, functioning of the image/ graphics, and simplicity of language use.

Table 5. Recapitulation distribution of the pre-test, post-test and final ordinary exam

NO	PRE-TEST OSPHE	POST-TEST OSPHE	ORDINARY EXAM
1	26	68	70
2	24	64	69
3	43	69	71
4	33	83	70
5	14	52	55
6	25	78	65
7	24	74	68
8	39	79	65
9	51	75	70
10	40	66	68
11	19	59	65
12	31	79	70
13	49	77	68
14	34	77	75
15	39	67	70
16	38	66	80
17	33	58	70
18	36	65	67
19	24	62	67
20	29	73	70
21	49	71	70
22	34	67	68
23	36	74	68
24	17	41	60
	32,79	68,50	68,29

Validity and Reliability

Station that more and more, the higher reliability and content validity of OSPHE can be achieved. Objectivity OSPHE achieved by the application of Public Health-Preventive Medicine skills that have been standardized and use of checklist assessment. The validity and reliability in OSPHE form exam give good results. Questions need to be tested have been prepared in advance to the other participants were tested prior to the actual participants. Problem being tested are all in valid questions, difficulty index is medium, and have good difference.

Evaluation of OSPHE Implementation

Objective Structured Public Health Examination (OSPHE) is actually part of assessment at Public Health and Preventive Medicine. Assessment is a very general term that describes the many techniques that we have used to measure and judge students behavior and performance… (Blerkom, 2009:6). Meanwhile, the OSCE is the purpose of assessing the competence and clinical skills of students in an objective and structured. Some kind of adjustment needed to carry out the final exam for Public Health and Preventive Medicine with OSCE model (OSPHE).

Some of the things below may become obstacles in the implementation of the Public Health and Preventive Medicine OSPHE otherwise noted: Public Health skills/case adjustments required to be 'translated' from OSCE to OSPHE language, public health problems need to be adjusted to the KDI 2011, required good coordination and integration among the various sections that exist in the Public Health and Preventive Medicine Department, required careful planning and adequate exam room, the number lecturers are quite a lot that can be ready and standby, to assess in each tested station (10 station), and a lot more time when compared with Conventional DM Exams. (About 4 hours), time allocation should receive greater attention, need more funds. Most important preparation and the main problem is the quality and quantity of Public Health exam in OSPHE form adequate, because CPS DM flowchart in Public Health and Preventive Medicine Department took place every five to eight weeks. Lecturers are required to be more productive in making the exam test of education for OSPHE model. However, it is unable to assess knowledge in depth, difficult to assess the ability in detecting abnormalities, and relatively easy to obtain the value of good communication skills and professional approach.

Some of advantages in the OSPHE implementation for Public Health exam are standardized and fair, and accountable, cases and types of tests more objective, little chance for bias testers, can be designed to all areas test of knowledge and specific tasks, can test the ability of the broad scope, able to assess students in large numbers, results and feedback can be obtained immediately, allows comparing the assessment of

students in the group, can identify weaknesses in individual students or groups, and ensure that all students receive assessments on all topics "must pass" on Public Health OSPHE.

CONCLUSIONS

All the results achieved in this study, can generally be grouped into three: First OSPHE socialization has been done to improve the understanding of the policy, the basic philosophy, OSPHE principles and procedures an objective, structured and inspection/ assessment of community health status. Second, once adjustments have been made socialization: situations and conditions (simulated) clinical exam problems into public health issues, as a basis for preparing IKM-KP exam in OSPHE format. The main output of this research is an OSPHE model for PH exam. The research conducted with action research, intended to obtain information both quantitatively and qualitatively on student learning outcomes, so it can be taken all decisions relating to a particular position next student. Third, has created guidelines for examiners checklist in OSPHE format, which includes knowledge, skills (analysis and diagnosis) public health issues, and interpersonal communication skills and public health. OSCE exam can be implemented in Public Health and Preventive Medicine Department, we next call OSPHE, with a few adjustments: communication skills and personal relationships, skills examination/ measurement for public health problem, skill to interpret and analyze statistical data and skill in making diagnosis and management of health problems (individuals, families and communities)

REFERENCES

1. Ali A, 2007, 'The objective structured public health examination (OSPHE): work-based
2. Batchelor, M. & Maxwell, T. 1987, 'Action evaluation', New Education, Vol. 9, Nos. 1-2, pp. 70-77
3. Blerkom, M.V, 2009, Measurement and statistics for teachers, Rotledge, Taylor & Francis, New York.
4. Dent J.A. & Harden, R.M. 2005. A Practical Guide For Medical Teacher. Second learning for a new exam' in: 'Work Based Learning in Primary Care' Radcliffe Publishing http://www.scottishdoctor.org/mainpage/http://brown.edu/academics/medical/education, 'An educational blueprint for the Brown Medical School at'
5. Harden, R.M. 2001. AMEE Guide no. 21: Curriculum mapping: a tool for transparent and authentic teaching and learning. Medical Teacher, Vol. 23, No. 2, pg. 123-137.
6. Harden, R.M, Shumway,J.M, 2003, 'The assessment of learning outcomes for the competent and reflective physician', Medical Teacher, Vol. 25, No. 6, 2003, pp. 569–584
7. Kemmis, S., and McTaggart, R. (1992;2000). In: Denzin and Y. S. Lincoln (Eds.) Handbook of qualitative Research (2nd Ed.)(pp. 567-605).
8. Kepmendiknas nomor 045/U/2002 tentang kurikulum inti pendidikan tinggi. Direktorat Jenderal Pendidikan Tinggi. Depdiknas, Jakarta.
9. Keputusan Rektor Unair No. 2994/JO3/PP/2003 tentang tata cara penilaian hasil belajar mahasiswa Unair.
10. Konsil Kedokteran Indonesia, 2006, Standar kompetensi dokter, Jakarta:konsil.
11. McClusky D, 2004, Essential skills practice for osces in medicine, Pastest, Ltd. Edition. Elsevier Churchill Livingstone.
12. Murtiyasa B, 2008, 'Action riset dalam pembelajaran' risetnpublikasi.files.wordpress.com/2008/10/aksiriset.pdf.
13. Norcini J, 2003, ABC of learning and teaching in medicine. Work based assessment' BMJ;326:753–5.
14. Norcini J, 2006. Standar Kompetensi Dokter. Konsil Kedokteran Indonesia. Jakarta.
15. Norcini J, 2005. Kurikulum Berbasis Kompetensi untuk Pendidikan Kedokteran Dasar.

QUALITY AND EFFICIENCY IMPROVEMENT OF PROFESSIONAL MEDICAL DOCTOR EDUCATION IN PUBLIC HEALTH FIELD USING OBJECTIVE STRUCTURED PUBLIC HEALTH EXAMINATION (OSPHE) APPROACH AT FACULTY OF MEDICINE

ORIGINALITY REPORT

6%	6%	2%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	fr.scribd.com Internet Source	1%
2	www.journal.unair.ac.id Internet Source	1%
3	journal.ugm.ac.id Internet Source	<1%
4	www.e-journal.unair.ac.id Internet Source	<1%
5	www.tandfonline.com Internet Source	<1%
6	www.aminef.or.id Internet Source	<1%
7	I. G. M. Aswin R. Ranuh, Gadis Meinar Sari, Budi Utomo, Nur Setiawan Suroto, Asra Al Fauzi. " Systematic Review and Meta-Analysis of the Efficacy of MLC901 (NeuroAiD II) for Acute Ischemic Brain Injury in Animal Models	<1%

", Journal of Evidence-Based Integrative Medicine, 2021
Publication

8	doaj.org Internet Source	<1%
9	id.scribd.com Internet Source	<1%
10	www.iasj.net Internet Source	<1%
11	hsrc.himmelfarb.gwu.edu Internet Source	<1%
12	researchbank.rmit.edu.au Internet Source	<1%
13	uswr.ac.ir Internet Source	<1%
14	www.neliti.com Internet Source	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		