THE FEASIBILITY OF A MONITORING AND EVALUATION MODEL OF ACADEMIC PERFORMANCE CLINICAL LECTURERS OF THE OTOLARYNGOLOGY-HEAD AND NECK SURGERY RESIDENCY PROGRAM

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Abstract - It is generally predicted that the academic performance of clinical lecturers of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr.Kariadi General Hospital has met the standards. However, the student’s on-time graduation rate is still low. The existence of this gap requires an accurate and informative model of monitoring and evaluation of the clinical lecturers’ academic performance. The purpose of this research was (1) analyzing the factual model of monitoring and evaluation of the clinical lecturers’ academic performance, (2) analyzing the hypothetical model of monitoring and evaluation of the clinical lecturers’ academic performance as needed, and (3) analyzing the feasibility of the developed monitoring and evaluation model of the clinical lecturers’ academic performance of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital. The research method used was a research and development design with three main steps, namely a preliminary study to find factual model, development study to find hypothetical model, and feasibility study to find the feasibility of the model. Qualitative approach. The sources of the data in this research were informants (lecturers, students, managers), data on the educational process, behaviour and habits regarding specialist medical education, academic monitoring and evaluation, and documents related to learning activity archives. The data collection techniques/tools used in this research were the interviews/interview guidelines, observations/observation sheets, and documents.
Data validity checking was done through triangulation techniques of research resources and tools. Data analysis techniques used in this research was interactive techniques through data collection, data reduction, data display and conclusions. The results showed that (1) factual model of the implementation of monitoring and evaluation (planning, implementation, and evaluation) was still limited to the fulfilment of accreditation for institutions and requirements for promotion and position, (2) the development model of monitoring and evaluation was already directed at meeting the accreditation standards, and strengthening the quantity and quality of student graduate, (3) the feasibility of the monitoring and evaluation model was feasible to be used as a model of monitoring and evaluation of the clinical lecturers’ academic performance as needed in the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital. These results were evidenced by the number of graduates, the on-time graduation rate, and the better quality of the graduates. Suggestions: (1) The need of synergistic collaboration between clinical lecturers and the management of Dr Kariadi General Hospital coordinated by the Education Coordinating Committee of Dr Kariadi General Hospital in implementing the monitoring and evaluation model of the academic performance of clinical lecturers in Dr Kariadi General Hospital, (2) the need of consistency in implementing the monitoring and evaluation guidelines carried out by hospital managers, the Faculty of Medicine of Diponegoro University, clinical lecturers, and students, (3) the need of a legal platform guaranteeing the continuous implementation of monitoring and evaluation.

**Keywords:** monitoring and evaluation; academic performance; clinical lecturer;

**I. INTRODUCTION**

Monitoring and evaluating the academic performance of clinical lecturers is one of the most important aspects of quality assurance. The quality assurance system is a systematic effort to monitor and evaluate various aspects of a project, service, or facility to ensure the fulfilment of quality standards[1].

The implementation of monitoring and evaluation of lecturers’ performance is part of the governance (management) system towards providing high-quality education. The National Education Standards are the minimum standards determined by the government and must be met including the standards of educators. One of the indicators of success in education is learning achievement and the on-time graduation rate. The academic performance of clinical lecturers is realized in Tridharma Perguruan Tinggi (Three Pillars of Higher Education comprising Education, Research, and Community service) [2],[3].

The Specialist Medical Education Program is a continuation of the education of general practitioners specifically in a particular field of medicine, taught by lecturers from the Directorate General of Higher Education and clinical lecturers from the Ministry of Health. Clinical lecturers/clinical teaching lecturers have the responsibility to carry out academic performance in the institution of the Medical Education Program and the Specialist Medical Education Program, to be devoted to specialist services in teaching hospitals, and to complete the supporting assignments [4]. It is generally predicted that the academic performance of clinical lecturers of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital has met the standards. However, the student’s on-time graduation rate is still low. The existence of this gap requires an accurate and informative model of monitoring and evaluation of the clinical lecturers’ academic performance.

**II. OBJECTIVE**

The purpose of this research was (1) analyzing the factual model of monitoring and evaluation of the clinical lecturers’ academic performance, (2) analyzing the hypothetical model of monitoring and evaluation of the clinical lecturers’ academic performance as needed, and (3) analyzing the feasibility of the developed monitoring and evaluation model of the clinical lecturers’ academic performance of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital.

**III. RESEARCH METHOD**

The research method used was a research and development design with three main steps, namely a preliminary study to find factual model, development study to find hypothetical model, and feasibility study to find the feasibility of the model. Qualitative approach. The sources of the data in this research were informants (lecturers, students, managers), data on the educational process, behaviour and habits regarding specialist medical education, academic monitoring and evaluation, and documents related to learning activity archives. The data collection techniques/tools used in this research were the interviews/interview guidelines, observations/observation sheets, and documents/checklists [5]. Data validity checking was done through triangulation techniques of research resources and tools. Data analysis techniques used in this research was interactive techniques through data collection, data reduction, data display and conclusions [6],[7].
IV. RESULTS AND DISCUSSION

1. Preliminary study and analysis of factual model of monitoring and evaluation of academic performance of clinical lecturers.

The Otolaryngology-Head and Neck Surgery residency program is one of the nineteen specialist medical education programs within the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital Semarang. There were 21 lecturers consisted of 7 (33%) lecturers and 14 (67%) clinical lecturers. The clinical lecturers consisted of seven clinical lecturers, one lecturer from the Public Service Agency, and six guest lecturers. The study period of this program was for eight semesters based on the Otolaryngology-Head and Neck Surgery collegium curriculum. The competency of graduates was achieved through nine divisions, including the knowledge and skills of Otolaryngology-Head and Neck Surgery. The students spent two-month cycles for three divisions and four-month cycles for six divisions. An evaluation was conducted at the end of each division and semester. The number of students was 48 students. The on-time graduation rate in 2017 was 10%. Many students who completed the study for more than eight semesters and did not earn predicate “with praise”.

The results of the analysis of interviews, documents, and descriptive data showed that the implementation of the specialist medical education program in the Faculty of Medicine of the University of Diponegoro was already conducted according to the standard procedures and arranged with various guidelines, starting from the constitution, government regulation, ministerial regulation, and the collegium rules. Implementation in the Otolaryngology-Head and Neck Surgery Residency Program was already arranged in detail through an internal quality assurance system (Sistem Penjaminan Mutu Internal or SPMI) of the Faculty of Medicine of the University of Diponegoro No. SPMI-UNDIP KM-04-01, effective from 2016.

Some findings in the implementation of monitoring and evaluation of the academic performance of clinical lecturers in the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital were as follows:

a. The planning and evaluation of the academic performance of clinical lecturers were conducted using the Employee Performance Unit (Satuan Kerja Pegawai or SKP) and well documented. However, the SKP assessment was not based on the actual measurements and still administrative for promotion. The planning of the academic performance of clinical lecturers, which included how clinical lecturers prepared the learning planning, materials, and time allocation to conduct student learning, was not yet optimal.

b. The implementation of SPMI by Quality Assurance Team of the Faculty of Medicine of the University of Diponegoro demonstrated the process of monitoring and evaluation of all aspects of education. However, the monitoring and evaluation of the clinical lecturers’ academic performance were never been conducted and listed in their policy. Performance indicator achievement was not associated with the Semester Credit Unit and incentives which led to demands/awareness of performance improvement was never done. The implementation of educational activities by clinical lecturers was not viewed parallel to the implementation by the DIKTI lecturers, while the roles and responsibilities were the same. The clinical lecturers might consider to have their own rules and judgments and have different supervisory agencies.

c. Clinical lecturers had not done good time management considering their workloads and busy schedule for the specialist services, thus reducing the time allocation to carry out the educational process and causing the low acceptance/response of students to learning activities. These reasons caused the students to not pass the examination in each division cycle and resulted in the low on-time graduation rate.

d. The guidelines of clinical lecturers’ performance were established by the Ministry of Health through the Regulation of the Minister of Administrative Reform and Bureaucratic Reform (Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi or PERMENPAN) No.17 Year 2008. However, the performance indicators of clinical lecturers did not obtain the assessment of the clinical lecturers’ activity in the teaching and learning processes. The use of performance guidelines by clinical lecturers was still limited to promotion requirement. This reason indicated the weak monitoring by the institution on the academic performance of clinical lecturers.

e. Monitoring and evaluation by students were only performed as a formality for institutional accreditation.

f. The inappropriate composition between the number of lecturers (33%) and clinical lecturers (67%) of the Otolaryngology-Head and Neck Surgery residency program did not meet the standards. This affected the input, process, and outcome of students' learning activities and the quantity and quality of graduates. The regulations of the Minister of Technology Research and Higher Education (Peraturan Menteri Riset Teknologi dan Pendidikan Tinggi or Permenristekdikti) No.100 Year 2016 determined the workload standard of 40 hours per week and the number of permanent lecturers (DIKTI) of minimum 60% of the total number of lecturers.[8]
Based on a thorough analysis of the results of interviews and documents obtained preliminary study results indicating that the factual model of monitoring and evaluation of clinical lecturers’ performance (planning, implementation, and evaluation) was still limited to the fulfilment of institutional accreditation and terms of promotion and position.

2. Development study and analysis of the hypothetical model of monitoring and evaluation of the academic performance of clinical lecturers

The developed preparation of the hypothetical model of monitoring and evaluation of the clinical lecturers’ academic performance of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital was based on the theory and needs analysis as follows:

a. The target of the model implementation was the improvement of the clinical lecturers’ academic performance of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital.

b. A comprehensive model formulation was a model consisted of planning, implementation, and evaluation.

c. The integrative and comprehensive approach of various performance indicators of clinical lecturers modified to focus more on the clinical lecturers’ academic performance and formulated along with the other performance aspects of clinical lecturers.

d. The planned principle was the clear planning by arranging the monitoring and evaluation documents or SPMI for an integrated institution between the Faculty of Medicine of the University of Diponegoro and Dr Kariadi General Hospital. The formation of the team and Standard Operating Procedure (SOP) monitoring and evaluation as well as adjusting the Employee Performance Target for clinical lecturers.

e. The organized or structured principle carried out periodically and gradually to determine the quality of clinical lecturers, especially in terms of position. The establishment of a precise schedule to organize the monitoring and evaluation properly.

f. The standard and detail indicators were provided by scores as well as simple, valid, and reliable measuring instruments to determine the quality of the clinical lecturers’ academic performance.

g. The basis used were valid documents from the planning, implementation, to results and evaluation stages. The document of the planning stage was a guideline consisting of direction, indicators, timing and schedule of monitoring and evaluation. The document of the implementation stage used as a performance measurement tool and proof of the performance. The document of the evaluation stage used as an evaluation material and a follow-up plan of monitoring and evaluation.

h. The monitoring and evaluation process led to improving the quality of the clinical lecturers’ academic performance as there were always be improvements and follow-up after monitoring and evaluation.

The developed product design was realized in the form of a handbook of monitoring and evaluation of the clinical lecturers’ academic performance. The handbook consisted of the planning, implementation, and evaluation stages. This model became the handbook for stakeholders of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital Semarang. The design validation to assess product design by clinical lecturers was conducted in a Forum Group Discussion and also cross-examined by two education experts of the Semarang State University, two practitioners and the manager of medical professional education. Table 1 summarized the result of model design validation conducted by the education expert of Semarang State University.

![Table 1. The results of model design assessment by education experts of the Universitas Negeri Semarang](https://www.ijirae.com/archives)

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<th>No.</th>
<th>Expert</th>
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Comments: 82 - 100 is very feasible [9].
TABLE 2. THE RESULTS OF MODEL DESIGN ASSESSMENT BY THE PRACTITIONERS OF DR KARIADI GENERAL HOSPITAL

<table>
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Comments: 82-100 is very feasible

The results of the validation process showed that the hypothetical model of monitoring and evaluation of the clinical lecturers’ academic performance of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital met the feasibility standard.

3. Feasibility study and analysis of the final model of monitoring and evaluation of the academic performance of clinical lecturers.

The feasibility of the hypothetical model, the following things were conducted:

a. Model trial. The Division of Neurotology of the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital conducted the trial with a 2-months rotation from January to February 2020 on three students and four clinical lecturers to see how the implementation of the model. They also conduct the trial to obtain information on whether the hypothetical model was more effective and efficient compared to the factual model.

b. Continued the observation of all stages of monitoring and evaluation of the clinical lecturers’ academic performance by assessing the response of stakeholders from both the institution and the students.

The trial results for the implementation of the hypothetical model showed that three students could complete the trial courses properly and timely at the end of the rotation with the final scores of 72.5, 76, and 73, respectively (pass limit score of 70). The responses from the stakeholders from both the institution and the students were good. The feasibility was practically assessed using the implementation trial test. The trial results showed a positive effect on the monitoring and evaluation process of the academic performance of clinical lecturers and students. The experts and practitioners conceptually assessed the feasibility and the validity of the model using a validity test with very good results.

Figure 1 showed the flow of monitoring and evaluation of the academic performance of clinical lecturers.
The completion of the final product of evaluation and input provided by the expert validator included writing and spelling mistakes, operational clarity, unnecessarily monitoring and evaluation measurements. The researchers improved the explanation of quality standards on SOP, including detailed descriptions of clinical guidance, such as bedside teaching, micro-skills, and the addition of the clinical teacher material. Based on the results of the test, we could generalize that the developed model by researchers was feasible to be used in monitoring and evaluating the academic performance of clinical lecturers.

V. CONCLUSIONS

(1) The factual model of monitoring and evaluation (planning, implementation, and evaluation) was still limited to the fulfilment of institutional accreditation and the terms of promotion and position. (2) The development of monitoring and evaluation model was already directed to meet the accreditation and strengthening the quantity and quality of student graduate. (3) The monitoring and evaluation model was feasible to monitor and evaluate the academic performance of clinical lecturers required by the Otolaryngology-Head and Neck Surgery residency program of the Faculty of Medicine of the University of Diponegoro-Dr Kariadi General Hospital. This result was evidenced by the number of graduates, the on-time graduation rate, and the better quality of graduates.

REFERENCES