

QUALITY IMPROVEMENT MODEL OF NURSING EDUCATION IN MUHAMMADIYAH UNIVERSITIES TOWARD COMPETITIVE ADVANTAGE

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ABSTRACT

Introduction: Most of (90,6%) nursing education quality in East Java was still low (BAN-PT, 2012). It was because the quality improvement process in nursing education generally was conducted partially (*random performance improvement*). The solution which might be done was through identifying proper quality improvement model in Nursing Education toward *competitive advantage*. **Method:** This research used survey to gain the data. The research sample was 16 Muhammadiyah Universities chosen using simple random sampling. The data were collected with questionnaires of 174 questions and documentation study. Data analysis used was Partial Least Square (PLS) analysis technique. **Result:** Nursing education profile in Muhammadiyah Universities in Indonesia showed of 10 years establishment, accredited B and the competition level in one city/regency was averagely more than three Universities becoming the competitors. Based on the quality improvement model analysis of nursing education toward competitive advantage on Muhammadiyah Universities, it was directly affected by the focus of learning and operational process through human resources management improvement, on the other hand information system also directly affected on quality improvement, also affected quality process components; leadership, human resources, focus of learning and operational process. In improving human resources would be directly influenced with proper strategic planning. Strategic planning was directly influenced by leadership. Thus, in improving quality of nursing education, the leadership role of department, proper information system, and the human resources management improvement must be implemented. **Discussion:** Quality improvement model in nursing education was directly determined with learning and operational process through human resources management along with information system, strategic planning factors, and leadership. The research finding could be developed in quality analysis application program.

Keywords: Quality, Nursing Education, Competitive Advantage

INTRODUCTION

Nursing education as an education that moves in health sector is required to prepare an alumnus in facing the increasing of health services quality requirement. A qualified education must be capable to be prepared competent alumni who can compete whether nationally or internationally. In facing the requirement of education quality, the problem that being faced today is the low quality of nursing education, including on University of Muhammadiyah. Based on the result of (BAN-PT, 2012), it showed accreditation grade in most of university nursing education institution (90.6%) in C accreditation.

Several things that caused the problem is most of nursing education institution has not conducting quality improvement model in a comprehensive way and are still conducting partially. Based on quality assurance system evaluation of university (DIKTI, 2008), shows from 384 university in Indonesia, only 68 university (17,7%) with a good SPMI category. And then from university that is aiming nursing education only (7.14%) that

having a qualified assurance system. Based on these things, it needed a proper quality improvement model that heading toward competitive advantage (Hidayat, Supriyanto, & Nursalam, 2015; Kuspijadi & Sudarso, 2009). Besides, based on the earlier study also have not been found quality improvement model of nursing education to competitive advantage.

METHODS

The research method is using survey approach. The research sample is University of Muhammadiyah in Indonesia which is around 16 University of Muhammadiyah that chosen simply random sampling. The data is collected by collects questionnaire, which includes 174 questions and collects documentation study throughout three month. Data sources obtained from primary and secondary sources. Primary sources can be obtained from respondent trough questionnaire and direct interview. The data analysis that being use is model testing by using analysis Partial Least Square (PLS) technique.

RESULTS

The result of this research showed the characteristic of nursing school that becomes a sample of this research was the average of nursing school was established ≥ 10 years ago with 62,5%. The result of accreditation nursing school from Indonesian Accreditation Agency for Higher Educational in Health with the amount of good result is 87,5%, and the average level of competition of the study program in a city is more than 3 universities that being the university competitor (Table 1).

The result of the analysis of nursing education quality process component of University of Muhammadiyah in Indonesia showed the average that possessing competitive advantage, they were leadership component of study program in the amount of 25,0%, strategy planning 75%, customer focus 50,0%, human resource focus 25,0%, learning

process focus and information system 50,0% (Table 2).

The result of analysis of nursing education component quality result in Muhammadiyah in Indonesia, they are leadership result component, strategy planning achievement, and the result of focusing on customer 50,0% it is already show the competitive advantage, the same result is happening in learning process and financial in the amount of 100%, and facilities and infrastructure 75,0% in the other hand for management of human resource result component 87, 5% that have not show the competitive advantage (Table 3)

The result of the influence testing between variable, shows the variable that aiming a direct result if T-statistic bigger than outer value loading T-statistic $>1,96$ (Table 4) and the model discovery of developing quality in higher education of Nursing can be visualized in figure 1.

Table 1. Profile of Nursing Education in University of Muhammadiyah 2016

No	study department profile	n	%
1	period of existence		
	- < 5 years	0	0
	- 5-9 years	6	37,5
	- ≥ 10 years	10	62,5
2	accreditation status		
	- A	2	12,5
	- B	14	87,5
	- C	0	0
	- Not accredited	0	0
3	The amounts of the same university in a city.		
	- none	0	0
	- 1	0	0
	- 2	0	0
	- 3	0	0
	- > 3	16	100

Table2. The analysis result of Nursing Education quality process component of University of Muhammadiyah toward competitive advantage

No	Process Component	Competitive Advantage			
		Yes		No	
		n	%	n	%
1	Leadership	4	25,0	12	75,0
2	Strategy planning	12	75,0	4	25,0
3	Focus on Customer	8	50,0	8	50,0
4	Human Resource Focus	4	25,0	12	75,0
5	Learning Process Focus	8	50,0	8	50,0
6	Information System	8	50,0	8	50,0

Table3. Analysis result of Nursing education component quality result in Muhammadiyah toward competitive advantage

No	Result Component	Competitive Advantage			
		Yes		No	
		N	%	N	%
1	Leadership result	8	50,0	8	50,0
2	strategy planning achievement	8	50,0	8	50,0
3	the result of focusing on customer	8	50,0	8	50,0
4	management of human resource result	2	12,5	14	87,5
5	the result of student process and learning	16	100	0	0
6	Finance	16	100	0	0
7	facilities and infrastructure	12	75,0	4	25,0

Table 4 The test of the influence between variables with Partial Least Square (PLS) test.

No	The influence between variables	Sample mean	T-Statistic	Complement
1	leadership to strategy planning	0.7423	15.8450	Significant
2	strategy planning to human resource	0.3199	3.3465	Significant
3	strategy planning to learning process.	0.2725	3.9500	Significant
4	human resource to learning process.	0.0693	1.9940	significant
5	human resource to the quality improvement with competitive advantage.	0.0570	1.1403	Not significant
6	learning process to the quality improvement with competitive advantage.	0.0900	8.9493	Significant
7	information system to leadership	0,6947	22.0510	Significant
8	information system to human resource	0.4193	4.4300	Significant
9	information system to learning process.	0.5477	7.7140	Significant
10	information system to the quality improvement with competitive advantage	0.2186	13.9950	Significant

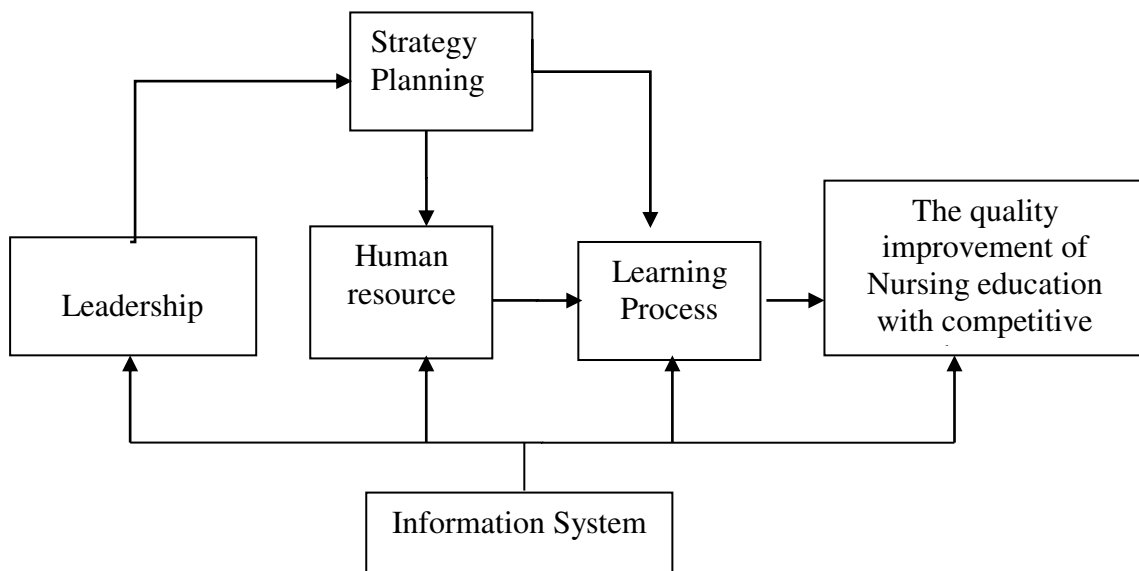


Figure 1. Quality development model of Nursing Education in University of Muhammadiyah toward Competitive Advantage

DISCUSSION

The model result from this analysis is quality development model of Nursing Education towards the top competitive, by emphasizing in the component process and the result of leadership indicator, strategy planning, and information system.

In that model, the component directly influence the quality developing is component process of learning and operational management also information system. Specifically for component process are very influenced by human resource, and human resource influenced by strategic planning, and strategic planning influenced by leadership. Besides that every quality component process influenced by information system, so information system has the role in boosting the quality development for every quality indicator.

Based on the findings of the model developed according to the *Higher Education Long Term Strategy (HELTS) 2003-2010 (DIKTI, 2004)*, to improve the quality of higher education and strengthening the nation's competitiveness required human resource management integrated with institutional management, and human resource management based competence and performance (Istanto, 2012).

Besides that the development of a model are directed to making the organization as a customer driven model that refers to the customer's needs and expectations toward competitive advantage, as well as the implementation knowledge management through knowledge sharing culture.

This is consistent with the model strategies that developed by Kenichi Ohmae with a model of strategic triangle or known as the model 3C (Corporation, customer, and competitive), namely in achieving competitive advantage of an organization must develop a strategic business-focused corporation, customer, and competitive (Ohmae, 1991). Organization/company that wants to be succeed and survive have to market what is required by the customer and remain in the competition, it means to be superior to its competitors, and can create competitiveness by implementing a value creation strategy (Hitt, Clifford, G., Nixon, & Coyne, 1999).

For that Kenichi Ohmae in strengthening the position of the strategy can be through the

utilization of human resources allocation, by using a relative advantage by finding the difference with competitors, using an aggressive strategic initiative to build an edge compared to other organizations, and to use the strategy to make innovation (Ohmae, 1991).

In winning the competition also takes control of the management of intellectual assets, this is based on a model that can be developed in this research is the implementation of knowledge management through knowledge sharing culture. The model is supported by the opinion of Ikujiro Nonaka SECI model that describes the life of the knowledge which undergoes a process described in a spiral shape, consists of socialization, externalization, combination, and internalization. Externalization process, is changing to explicit knowledge. The process of combination, utilizing existing to explicit knowledge that is implemented into another. This process is very useful for developing skill and self-productivity. The internalization process, is changing the coming of inspiration of explicit knowledge as tacit knowledge. The socialization process that change tacit knowledge to another tacit knowledge (Mulyanto, 2008; Sangkala, 2007).

CONCLUSION

The profile of Nursing Education at University of Muhammadiyah in Indonesia showed an average established is 10 years old, with B accreditation status and level of competition in a program study in a city is an average of more than three universities that are the main contenders.

The model of quality improvement in University of Muhammadiyah towards Competitive Advantage is to emphasize on the components process and outcome from indicators of leadership, strategic planning, focus customer, human resource focus, the focus of the learning process, and information systems. In the model component directly affects the quality improvement is a component of the learning process and operational management and information systems. Process components is strongly influenced by human resources, and human resources is influenced by strategic planning, and strategic planning are influenced by the leadership.

Quality improvement model can be used in courses that have the same indicator if you want to make universities that have Competitive Advantage, besides the results of research can be developed to compile the application program analyzes of the quality improvement of nursing education based electronics, so as to accelerate the identification of the findings of the components of quality weak to be improved.

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