THE IMPLEMENTATION OF PROBLEM BASED LEARNING IN NURSING EDUCATION: AN INDONESIAN EVIDENCE

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ABSTRACT

Nursing education in Indonesia, including in the faculty where the study was conducted, has implemented a competency-based curricula by applying the Problem Based Learning (PBL) method since 2007. Several studies have been done to evaluate the implementation of the method. However, a thorough evaluation has never been conducted. This study aims at getting a comprehensive overview of the learning process by implementing PBL method in nursing education in Indonesia. This study is a qualitative in nature. The data were collected through Focus Group Discussion on several groups of participants who were involved in the learning process. There were five themes reveal from this study such as: the PBL method is less appropriate for nursing education, lack of resources to support PBL, there are concerns with technical problem in implementing PBL, there is a difference perception and understanding about some cases that were discussed among tutors, and the development of soft skills are unequally among all students.

Keywords: Problem based learning, evaluation, comprehensive, learning process.

BACKGROUND

Since 2007, several Universities in Indonesia have implemented competency-based curriculum by applying problem based learning (PBL), including the University where the study was conducted. The purpose of the implementation of this curriculum is to produce students who are active, smart, competitive, and comprehensive. PBL is believed as a method to motivate student-centered active learning, increase understanding, and stimulate someone to learn (Tang, Huan, & Hsu, 2005). In addition, the PBL method can also increase the students' problem solving capacity through a discussion in the form of tutorials (Erol, Yesin, and Mahmet, 2008).

The learning process by using PBL method in its implementation did not always run smoothly. A lot of obstacles even some problems occurred in each process (Carlisle & Ibbotson, 2005). Therefore, learning evaluation is needed to determine students' progress and to provide feedback for the improvement of learning activities. Learning evaluation system developed based on a number of principles that is holistic, sustainable, indicator achievement oriented, and in accordance with the learning experience (Beers, 2005).

Evaluation serves as feedback is good for faculty and students, to determine graduation, for the diagnosis and to determine the difficulties in learning (Ducan, Lyons, & Al-Nakeed, 2007). Gurpinal Yesim, and Aktekin (2008) in their study on the evaluation of PBL method in Akdezit University School of Medicine, Turkey found that 66.9% of respondents said PBL method is unbelievably helpful to be applied in the study. Results of the research conducted

by Kushartanti (2010) also showed that PBL method is helpful in improving learning quality, in terms of both process and results.

However, the result of a research in the Faculty of Medicine University of Qassim in Saudi Arabia conducted by Shamsan and Syed (2009) showed that after 18 months of implementing PBL method, respondents felt tedious with some routine of the PBL approach used in tutorial groups. The tutorial became no longer challenging and motivating to the students. The study concluded that PBL caused a bad impact on students' performances.

Since the implementation of PBL in 2007 at the Faculty where the study was conducted, the curriculum based competency with PBL method has shown some improvements and developments. Yet, a comprehensive evaluation of the implementation of the method in learning proses has never been conducted before, therefore it is necessary for a comprehensive evaluation to be conducted in order to get a new insight on the implementation of PBL method in nursing education in Indonesia.

RESEARCH METHOD

This study is a qualitative study. It meant to comprehensively evaluate the implementation of PBL method in learning process. Participants in this study were divided into four groups. The four groups were consisted of a group of students (10 participants), a group of lecturers (tutors, 8 participants), a group of academic administrators (8 participants) and stakeholders (clinical supervisor, 8 participants).

The data in this study were collected by applying focus group discussions (FGD) led by a moderator who had been trained before. FGDs were conducted on each group. Focus group discussion ran based on its guidelines by Richard Krueger (2009). The process of FGD was recorded using the voice recorder. Before starting the FGD, participants were told that the FGD would be recorded, and the recording device was certainly ready to record. The data were analyzed using Krueger approach. According to Krueger (2002), in the analysis and presentation of the results of FGD, the researcher must use a systematic analysis, verifiable procedures and appropriate reporting.

RESULTS AND DISCUSSION

Based on data analysis, the study found five themes as follows: the PBL is less appropriate for nursing education, lack of resources to support PBL, there is concern with technical problem in implementing PBL, there is a difference perception and understanding about some cases that are discussed among tutors, and the development of soft skills was unequally among all students.

PBL approach is less appropriate for nursing education

This theme was found in almost all groups discussion group. On the third group revealed that the PBL approach was less suitable for nursing, because the students were more focused on medical diagnosis rather nursing care for the patients when they were practice in a hospital. Participants from group of clinical supervisor complained about students in clinical practice are more focus on medical diagnosis and treatment rather than nursing diagnoses and nursing interventions. As expressed by a participants " They (students) tend to *focus on medical treatment. They feel that they have done intervention when they have given medicine or done*

nyuntik. While oral hygiene was not done. Another participant added, "*Indeed, the critical thinking of the students is good but somehow they feel unnecessary to do nursing intervention*"

Another participant added, " *nursing students must be focus on nursing diagnoses. Why the recent student become not aware of their role. They just focus on medical treatment and procedure.*" Other participants reinforce opinion by stating "*yes, nursing care should be the major focus, so students should be more focus on client's response*"

Similar to the clinical supervisor, group of lecturers also expressed criticism that not all courses matched with the PBL approach and system. In addition, with such an approach not all cases can be discussed. Therefore, when students find a case that has not been discussed in Campus, they cannot do nursing care for the patient. Below is an expression of one of the participants of the group of lecturers:

> "PBL method is not suitable for learning about community nursing because only a bit term which unknown for the students while in the first step of PBL, the students are asked to find some unknown term. So, For community nursing it is suitable to use peer teaching method".

Furthermore, other participants stated: " *for example, in cardiovascular system only 4 cases provided for discussing in the learning process. That's all. It didn't covered heart failure in children, so there are not covered*".

Lack of resources to support PBL

This theme is most widely expressed by participants of group of students and academic staff. The student group also revealed a lack of infrastructure such as books, and poor internet connection. As revealed by one of the participants in this group:
"The main complaint is about wifi, the internet is very slow when loading. For the library, there are several books are not up to date, while in reporting step the students should find recent book related to the topic."
From the group of academic staff, participants complained about the number of tutorial room which was insufficient, so they were almost overwhelmed in overcoming this problem and stated "*for study program that has lack of facility, it would be better to apply a conventional teaching method* "

Concern about technical problem in implementing PBL

In the process of the implementation of PBL, there were a lot of technical problems experienced by the tutors, students and also academic staff. The main complaint was about the schedule, readiness of Course study guide, unclear assignment, students had no prior knowledge, and the cases discussed were not update so that they were not enthusiastic in the learning process.

One of the participants of the student group revealed a problem related to the schedule "*So far, Our schedule with tutors often not matching. Some others students also complain about this issue*".

In addition to schedule problems, the coordinator of the course often came late in preparing their Course Study Guide and they did not renew it. One participant from the academic staff revealed "Lecturers were often late in submitting Course study guide, and most of them were

not renew them" Participants from the group of lecturers also reveal the same thing with the academic staff. Regarding the case of the Course study guide, one of the participant from the group of lecturers stated" Not all cases were changed, many of which use the old ones " Furthermore, another participant revealed:

In the early of implementing PBL, the students' enthusiasm in the early of implementing PBL were different from the current students. It is perhaps because the current students have already known about the cases from the previous class. Thus, they were less enthusiastic to discuss the cases.

Difference perception and understanding about case that are discussed among tutor

This theme emerged from the students as expressed by the participants in the group of students "the tutors did not have the same perception about the case". Another participant also revealed the same thing" Tutors did not have the same perception".

To overcome these problems, the participants from clinical instructor's group suggested that lecturers or tutors should have a common perception as it was expressed "There should be a common perception between lecturer and clinical instructor.

The development of soft skills unequally among all students

The last themes were associated with soft skills development among students after undergoing a learning process with PBL method. This study found that the soft skills development among the students were not equal. It was related to the opportunity given to the students to develop their soft skills as revealed by one of the participants of the group of students:

"There are some tutors who did not give the same opportunities for students to express their opinions, or when there was a discussion, only some students who speak out their opinion. In this way only active students would increase their soft skills ".

Besides the unequal development of soft skills among the students, there were also students who became over confident. Some students become overconfident or too confident as expressed by the participants of the lecturers group "they become overconfident".

Of the seven themes that were unfolded from this study seems that some things need to be taken into consideration before PBL learning method is applied or continued to be applied in nursing education institutions. All the themes that emerged in this study will be discussed as follows:

DISCUSSION

The seven themes that emerged in this study will be discussed in this chapter.The theme is discussed with reference to the theory and related concepts and latest research related to the theme.

PBL approach is less appropriate for nursing education

Approach appropriate learning methods greatly affect the quality of graduates (Beers, 2005). Therefore, it should be determined the method to be used in a study program learning outcome should determine it first. The method used must be capable of supporting a method of learning outcome achievement.

The results showed that all groups whether groups of students, lecturers or field supervisor stated that PBL method using a systems approach is not appropriate for nursing. The mismatches due to the lack of compatibility between the approach used in the academic stage and those used in professional stage. In the academic stage uses a system approach. In the profession of nursing approach scientific groups such as medical-surgical nursing, child nursing, maternity and so on. Consequently, when the field practice of students only focus on problems and medical interventions, appropriate body system they have learned in the academic stage and neglect of nursing interventions. These circumstances certainly should receive a very serious attention from the manager of the nursing department, to immediately revise the existing teaching methods for learning outcomes are not achieved.

Nursing belongs to the group consists of human science of science and art, not only science course. In order to be able to do caring, nurses must have the ability to analyze of the patient's condition. But more importantly is the ability to empathize, such as giving assistance to patients and good communication (Pham, 2015).

Lack of resources to support PBL

In this study, participants experienced lack of supporting facilities of PBL program. They revealed that all the facilities such as room, Wi-Fi, OHP, projectors, lab space, large room, sound system, everything is still insufficient and needs to be repaired. Based on these results, the faculty as an organizer of educational programs that apply the PBL method needs to improve and expand its facilities, and infrastructure. It is necessary to make students quite comfortable and feel motivated to learn. Then, as a result, the implementation of PBL method will be running as it supposed be.

The results of this study differ from previous research by Newman (2005) in the UK. Research results show that the majority of respondents (83.1%) expressed a positive perspective to the PBL method they run. This is caused partly because of the amenities, facilities, and infrastructure there are very nice and adequate to support the students in the course of their study.

So, before carrying out lectures with PBL method, it is necessary to well prepare the facilities and learning support and lecturer plan. Means of support is very important because without adequate means of learning will not be able to run well.

Concern about technical problem in implementing PBL

Based on the results of this study, it is found few technical obstacles in the implementation of PBL. This theme is also important to be discussed as consideration for the managers in determining teaching methods. The technical constraints, among others about the scheduling, unpreparedness Course study guide (CSG), unclear tasks, and lack of renewal cases to learn.

One key feature of the PBL is the principle of self-directed learning or independent learning where students are responsible for their own learning process (Ozurk, Muslu, and Dicle, 2008). The learning process is stimulated through small group work from beginning until the end of learning activity (Beers, 2005), because of the clarity of duties and readiness CSG from the beginning of the term to be very important. If a given task or a given case is less clear it will cause confusion for the student in finding the direction of solving the problem, which in turn can make students feel frustrated to learn.

At the beginning of the learning methods of PBL lecturer should explain the purpose of learning, build a positive attitude towards the subject, and describe something that is expected by the students (Savery, 2006). Lecturers must first explain the processes and procedures in order to better understand to this method and detailed. The tutors must talk to the students that the main objective of students to search and learn a large amount of information is to investigate critical issues related to the case. During the phase of the investigative lesson the students will be encouraged to critically evaluate articles being investigated (Duncan, Lyons, & Al-Nakeeb, 2007).

Difference perception and understanding about case that are discussed among tutor

From the results of this study found in the implementation of learning, there is no equal perception among faculty tutors on the case and on the material used for triggering the students understanding on the concepts and theories. This theme mostly appears as stated by the participants of a group of students as expressed by the participants in the group of students "Lecturer - his professor yet the perception ... The difference perception among faculty tutors on the cases discussed could certainly cause confusion for students. When a group is discussing with another group about cases discussed, they found different opinion. The situation cause confusion among the group and eventually make them demotivated.

The difference is caused by different perceptions of the academic level of faculty tutors who became a senior lecturer. Not all tutors are lecturers, there is also a fresh graduate who became a tutor. Besides, it is also because most faculty tutors are not from the nursing department, so they do not understand what is being discussed by students.

To overcome the differences in perception among lecturers preferably before the course starts all lecturer tutors should follow the briefing, the perception of the cases will be discussed. In addition, the competence of lecturers as facilitators needs to be improved because of their competence is needed in the implementation of the PBL method. The role of the lecturer is to prepare scenarios that then were discussed, prepare materials and learning resources, and encourage students to explore knowledge they already possess the necessary knowledge and determine the next (Gurpinar, Senil, & Aktekin, 2009)

The development of unequal level of achievement of soft skills among all students

The last theme is associated with the development of soft skills among the students toward the learning process with PBL method. This study found that the development of soft skills among the students were not equal. It was related to the opportunity which is given to the students to develop their soft skills. It was revealed by one of students in the group:
"There are some tutors who do not give the same opportunities for students to express their opinions, or while the discussions are still running, they just talk. They cannot explain it. When it happens, the only skill that increased is just speaking skills."

The unequally soft skills among the students that make some students have bad habit such as being *overconfident.* It also develops bad attitude toward the student. It was expressed by the participant of the group "they become overconfident".

From all the seven themes which are revealed from this study seems to be some things that need to be considered before PBL learning method applied or continued to be applied in nursing education institutions. So, all the themes that found in this study will be discussed more deeply in this research.

CONCLUSION

This study is a qualitative research that aims to explore and evaluate the overall learning process with PBL method that occurred. Based on the research paper scanning and fourth transcripts participants, it found some topics are very often expressed by participants. In the group of students, such as the evaluation process and difference among the perception of lecturers. In the field advisory group, such as complained about the lack of students' focus on the aspects of nursing during practice, instead the students focus to the medical aspect. This study found the main ideas which are presented by all the participants from all groups that the PBL method is not suitable to be applied to the students who takes nursing and it is hard to achieve the learning outcome of nursing.

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