**How does clinical teacher help students developing nursing diagnosis?**

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**Abstract**

Problem solving and decision making are two main components of clinical reasoning process; developing nursing diagnosis is a part of clinical reasoning process since it finds one solution which is the best solution for patient. Developing nursing diagnosis is second step of nursing process when nurse help patients to solve their nursing problem. However, deciding the nursing diagnosis is not easy thing to do especially for students who join the internship phase for the first time (novice students). The objectives of this study are to know the experiences of the clinical teacher in nursing, especially students’ difficulties during deciding the nursing diagnosis from clinical teacher’s perception, the causes of those obstacles, and how clinical teachers derive the strategies to solve those problems, and implication those strategies for clinical teacher.

The data were collected by conducting in-depth interview to three clinical teachers in Nursing Program, Diponegoro University, Semarang, Indonesia. Each interview is conducted for at least 20 minutes for asking several questions such as: the problems are faced by students when they develop the nursing diagnosis, the causes of those problems, the strategies were used by clinical teacher to solve the problems, and the implications for teacher related to the strategies were used.

The result shows that there is the same perception between students and teachers about students’ difficulties during developing nursing diagnosis. Students did not have enough self confidence to compose the nursing diagnosis even though they had the data from assessment. The cause of this problem is students got minimum supervision or feedback from clinical teacher. To overcome the problems, clinical teachers used several strategies such as: using CD Rom as teaching material and case method before students join the internship phase while enriching feedback for students and conducting bedside teaching during the leraning process in clinical setting. The last strategy is encouraging students to read as much as they can.

The implication for clinical teachers is to enhance their experiences and to improve their quality by joining training and seminars, and conducting research in related topic.

Keywords: clinical teachers, nursing students, nursing diagnosis

**Introduction**

Problem solving and decision making are two main components of clinical reasoning process (Deber & Baumann, 1992); developing nursing diagnosis is a part of clinical reasoning process since it finds one solution which is the best solution for patient or chooses one of several solutions. Developing nursing diagnosis is step two of nursing process when nurse help patients to solve their nursing problem (Capernito-moyet, 2006). This step is conducted after nurses do some assessments in order to gain the data from patients, and it is a statement of patient’s nursing problem. Nursing diagnosis is very important for nurses since it can direct nurses to compose nursing interventions, and implement those for helping patients to get their healthy.

However, deciding the nursing diagnosis is not easy thing to do especially for students who join the internship phase for the first time (novice students). According to one of students in Nursing Program Diponegoro University joining the maternity nursing stage, she gained the data from patients by conducting several assessments, but they confused when they had to decide which diagnosis is suitable to the data even though there was guidance book of nursing diagnosis. It can be happen because patient is unique, not all of data in the book same with patient’s condition so in this case student must be more creative to decide the nursing diagnosis. Anothe student feel not easy to apply the theories which are gained in academic phase into patient’s condition or reality particularly when decide the nursing diagnosis. In addition, a student said that minimum supervision and guidance from teacher or clinical instructors is one of difficulties for students to decide the nursing diagnosis since supervision is important for student which can help students to decide whether the data are normal or abnormal.

According to Eva (2004), there are several implications for clinical teachers to help their students pass the internship phase especially when they must decide the clinical reasoning. First, many example of cases must be elaborated for student in order to help them build the foundation and involve them in problem solving process. Then clinical teachers make sure that students have capability in biomedical theory before they come to the ward since biomedical science is a principle for student to find solutions for their cases. Third, students are encouraged to work in many cases in clinical setting because cases from textbook do not help student to distinguish the case if they find those in reality. In addition, clinical teachers have spirit to teach student as an individual when they allow students to make mistakes during deciding clinical reasoning. The last is a proper evaluation can help clinical teacher to evaluate the students’ capability depend on level of knowledge.

Furthermore, the same idea came from Kaufman (2008)mentioning that basic science knowledge or biomedical theory affected students during make diagnostic reasoning. Students who got this knowledge before entering clinical stage were able to compose a clinical diagnostic than students who did not get the basic science knowledge. Kaufman (2008) added that experience also important for students to make diagnostic reasoning since according to his study that forth level of students were easier to decide the clinical reasoning than second or first level of students.

In fact, the number of study which is held in nursing field about clinical reasoning, especially in teachers’ roles to develop nursing diagnosis, is limited. Previous study about the same theme was conducted in occupational therapy. It is Neistadt (1996) conducting the study mentioned that clinical teachers in occupational therapy have different roles to help students in clinical reasoning, depend on the type of clinical reasoning itself. For instance, occupational therapy students will be an expert in narrative reasoning when their teachers encourage them to read and analyze about one topic or one case, and it totally different with procedural reasoning when students are motivated to join case study exam. Other type of clinical reasoning ask teacher to serve students with many cases about ethic so students will be better in pragmatic reasoning.

All experts agree that every field in health science has their own characteristics. It means that occupational therapy is not same with nursing; that is why this study was conducted. It is possible for clinical teachers in nursing do not have same strategies which are used by clinical teachers in occupational therapy. For example, to help students understand about Leopold maneuver, one of physical assessment for pregnant women, Kazuhiro, et.al. (2003) use CD ROM as a teaching material. The aim of this strategy is to give clear information about one topic for the students so they can use this information as a basic knowledge when they have to decide the clinical reasoning. Based on that, the objectives of this study are to know the experiences of clinical teacher in nursing, especially to know the students’ difficulties during deciding the nursing diagnosis from clinical teacher’s perception, the causes of those obstacles, and how clinical teacher derives the strategies to solve those problems, and implication those strategies for clinical teacher.

**Method**

In this study, the data were collected by interviewing three clinical teachers in Nursing Program, Diponegoro University, Semarang, Indonesia. They are experts in maternity nursing, and they guide their students in ward twice a week. They have been the clinical teachers almost ten years so they have quite experience about how to guide students in clinical reasoning or in developing nursing diagnosis. The methods used during their supervision are preconference, post conference, and bed side teaching. Each interview was done in discussion room, and it took 20 minutes; during this process, several tools were needed, such as interview guidance or list of questions and recorder.

Furthermore, the big theme of this interview is the experience of clinical teachers during guiding students to develop the nursing diagnosis. There are several questions were asked, first is the problems are faced by students when they develop the nursing diagnosis, what are the perception of teacher about students’ difficulties? Is there any same perception between students and teachers about students’ difficulties during developing nursing diagnosis? Second is the causes of those problems; do the causes come from students or from others including teachers? Third is the strategies were used by clinical teacher to solve the problems. Do the teachers have strategies used to help students come up with their problem especially in nursing diagnosis? And the last is the implications for teacher related to the strategies were used; do the strategies give impact for the teachers, both positive and negative impact?

**Result and Discussion**

The aims of this study were to know the experiences of clinical teacher in nursing, especially to know the students’ difficulties during deciding the nursing diagnosis from clinical teacher’s perception, the causes of those obstacles, and how clinical teacher derives the strategies to solve those problems, and implication those strategies for clinical teacher.

The first finding of this study was the same perception between students and teacher about students’ difficulties during developing nursing diagnosis. In introduction was mentioned that students confused to choose which diagnosis is proper with the data in patient and difficult to implement the theory in clinical setting. One of the clinical teachers also felt the same; she felt that students did not have enough self confidence to compose the nursing diagnosis even though they had the data from assessment. For instance: from theory, students know that postnatal bleeding is happen if mother has vaginal discharge more than 500 ml/day, abnormal characteristics of vaginal discharge, and uterus contraction is weak. When they faced the patient who has the same symptom with postnatal bleeding, they cannot decide the diagnosis because they do not know how to count vaginal discharge more than 500 ml as vaginal discharge is in peripad or abnormal characteristics of vaginal discharge since they do not know the normal characteristics of vaginal discharge; the strength of uterus contraction because they do not know how to assess the uterus contraction They are good in theory but not for skill and implementation.

Furthermore, according to clinical teacher, one of the causes of this problem is students got minimum supervision or feedback from clinical teacher, like Neistadt (1996) said that supervisor never give students feedback. It is difficult for clinical teacher since probably students do not realize that they get feedback from their teacher or problem with data collection of feedback which is got by students. In this case students will have enough self confidence to develop nursing diagnosis in postnatal mother with postnatal bleeding if clinical teacher give them feedback by guiding them how to count vaginal discharge, how to distinguish abnormal and normal characteristics of vaginal discharge, and how to assess uterus contraction and decide the strength of it. Then students can compose nursing intervention and implement it in order to help postnatal mother to free from postnatal bleeding.

Hence, it needs strategies to cut the problem chain. From the data, one of the clinical teacher said that she used CD ROM teaching material. Before students join the internship phase in maternity ward, she played video about physical assessment in postnatal mother, then she practiced it in laboratory. This method was applied by Kazuhiro; et.al (2003) used CD ROM teaching material to help the students understand about delivery process step by step. Besides CD ROM teaching material, video tapping is also important as a teaching material especially in procedural reasoning since it closer into clinical practice (Neidstat, 1996).

In addition, another clinical teacher used case method to introduce the students with clinical setting; she used a report case from senior student and asked junior students to solve this case based on the theory. She said that this method can help students to integrate their understanding about one case since in this method case can be analyzed from many views, and they must conclude it into one solution. Case method is proved effective to improve students’ capability in problem solving and clinical reasoning especially in occupational therapy students (Vanleit, 1995). In the same discipline, occupational therapy, Neistadt (1996) said that evaluation with case study can facilitate students to implement procedural theory in clinical setting.

Third method is give specific feedback; one of clinical teachers said that feedback is very important for students to know their improvement or achievement in developing nursing diagnosis. They can fix their mistakes or search more information about theory that they do not know. According to Bowen (2006), giving specific feedback during composing clinical diagnostic can help students to identify important and less important data.

She added that bedside teaching is an effective method, particularly when students do assessment to gather the data. She said that most of clinical teachers in nursing science use bedside teaching as teaching method in clinical setting since in this method clinical teacher show how to act one skill to the students directly, and students can re-demonstrate the skill. According to Ramani (2003), competences in clinical skills and communication skills will be achieved if use bedside teaching as teaching method. In this case, when student do not know how to assess uterus contraction; whether it is strong or weak, clinical teacher can help them by showing the way to assess and give example which contraction is strong and which one is weak. However, in recent time, the quality bedside teaching is decrease because of the quality of a clinical teacher as a bedside teacher (Ramani, 2003). More teachers ask their students to study in class room rather than in clinical setting since more teachers do not have enough capability to practice a procedure on bedside.

Another method which is as effective as other methods is encouraging students to read as much as they can. Reading can help students to enrich their knowledge about cases and it will useful when they have to use their knowledge in another case. Therefore students must read at least two similar cases, then comparing and contrasting both cases to find the similarities and differences, so they can use their understanding about the case when they face the same case (Bowen, 2006). For example: students are motivated to read postnatal bleeding and prenatal bleeding. Both cases have similarities in bleeding but the timing is different, then students can develop the nursing diagnosis related to patient’s condition.

Accordingly those methods, it must be implications both for clinical teacher and institution; idiom “no pain no gain” could be placed in this condition. In order to improve students’ quality in clinical reasoning, the clinical teachers’ quality must be improved. For instance: to do bedside teaching about one case, clinical teachers must be an expert in that case; they can join trainings or seminars about the case or conduct deep research in the case, therefore it will spend money and time. As it is mentioned by LaCombe (1997) that when clinical teachers want to be effective bedside teachers, they have to improve their physical diagnostic skills.

Next is implication for institution. In order to help student gain more knowledge, institution must service facilities, both in quality and quantity. For example: to give new perception about clinical setting using CD ROMs, institution must has a lot of CD ROMs and video tapping with various cases. These can be bought or be composed by institution depend on the need. Institution also must service many books or journals as references for students in order to encourage them to develop reading habit; again, those implications will spend money. Another implication is institution must has curriculum which use case study as one of methods to deliver the topic since case study is effective method to integrate basic knowledge into clinical setting, and it is better to introduce them about clinical reasoning and problem solving by case study since they are in academic phase.

Thus it is better to have the number of clinical teacher as many as students, its mean that the ratio of clinical teacher and students must be balance, since giving specific feedback only can be done if a clinical teacher observe a student all the time. It can be applied if one clinical teacher responsible to students not more than two students. It allows them to do their job to help students develop the nursing diagnosis in clinical setting.

Furthermore, as a recommendation for further study, it will be better to conduct study in other subjects in nursing; they could have other strategies and implications in clinical teaching especially in clinical reasoning. Those strategies will be enriching the strategies that have done, and those will be shared to other clinical teachers or to other subjects in health science.

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