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THE INFLUENCE OF BEDSIDE TEACHING APPLICATION TO STUDENTS ABILITY OF D III NURSING IN DETECTING RESPIRATION SYSTEM STABILITY IN ICU ANESTHESIA

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ABSTRACT:

Purpose of the study: This research was done to analyze the influence of bedside teaching application to students' ability of DIII Nursing in detecting respiration system stability in ICU Anesthesia.

Methodology: The design of this study used pra experiment with one group pretest-posttest design. The population was students who clinical study of emergency in ICU with 23 respondents and the sampling used was Simple Random Sampling. Data ware collected with a questionnaire and checklist. Analyzed data using the t paired test and SPSS.

Main Finding: From the statistics, the result showed that bedside teaching was influenced by the students' ability of DIII Nursing in detecting respiration system stability with t result 15,984 (t table = 2,27) which means there is a significant influence.

Applications of this study: Bedside teaching is a learning method for a student that was doing inside of the client.

Novelty / originally of this study: Bedside teaching applications could promote students' ability to DIII Nursing in detecting respiration system stability. Its job to learn a client's condition on nursing care who has need. The students, notability yet detect respiration system stability.

KEYWORD: Bedside teaching, respiration system, the detecting ability, ICU.

INTRODUCTION:

Nursing DIII education is a professional academic education through various forms of learning experiences, especially clinical learning experiences and field learning experiences carried out in the real setting of health care. The practice environment gives adventurers to students to establish their decision-making skills in the patient situation as events begin revealed (Radia Astuti, 2000). Sidoarjo District Hospital is one of the health service facilities used for developing clinical learning experiences (Nursalam, 2002). In clinical learning experiences, students are required to be able to carry out nursing care in real situations with a variety of clinical learning methods. In the ICU Anesthesiology room students have not been able to detect the stability of the respiratory system (B1: Breathing). While the clinical learning methods used must be able to guide students to achieve these abilities.

Article Subra Ramani University of Boston School of Medicine, Boston, United States (2003) Twelve tips for improving bedside teaching show In the United States, less than 25% are discussed clinically at the bedside and less than 5% and correct examination techniques that wrong (Shankel & Mazzaferi, 1986). LB Gerson and J. Van Dam Research, Division of Gastroenterology and Hepatology, Stanford University School of Medicine, Stanford, California, USA (2004) Randomized Trial Trials Comparing Virtual

Reality Simulators with Bedside Teaching for Sigmoidoscopy Training, presented in general, methods their research. By way of Bedside Teaching and simulators. Patients in the research group the Bedside Teaching method were satisfied with the care they received and received that had been done correctly.

In our study, four educational institutions use the ICU room at Sidoarjo District Hospital as a place to develop clinical learning experiences, including the Health Training Center of PPNI Mojokerto, AKPER Mojopahit Mojokerto, AKPER Satria Bakti Nganjuk and Poltekkes Sidoarjo (ICU 2007 data). STIKES Health Development PPNI Mojokerto, Sidoarjo Poltekkes, and AKPER Nganjuk use the Bedside teaching-learning method, and Mojopahit Mojokerto AKPER uses consultative. While patients treated in the ICU in January 2007 were 312 patients classified by type of anesthesia, 126 patients with General Anesthesiology (GA) and 186 patients with Spinal Anesthetic Block (SAB). In February 2007 there were 334 patients classified by type of anesthesia, 113 patients with General Anesthesiology (GA) and 221 patients with Spinal Anesthetic Block (SAB) (OK anesthesia data, 2007). Postoperative patients with GA will have respiratory system instability (B1 disorder: respiratory system).

Patients who will undergo surgery are also subjected to anesthesia. Giving anesthetics in surgery can cause life-threatening complications due to airway disorders, circulation, and brain function that can be caused by drugs and anesthesia techniques or because of surgery (Karjadi Wirjoatmodjo, dr. Sp.AnKIC, 2002). General Anesthesiology (general/general anesthesia) using inhalation or parenteral anesthesia drugs causes an increase in levels of anesthetic drugs in brain tissue resulting in relaxation of all organs and systems throughout the body. In the lung organs, the respiratory system at the time of anesthesia must be maintained by administering artificial respiration. At the end of surgery and anesthesia, the opposite condition occurs. The level of anesthesia in the brain tissue gradually decreases so that the function of the respiratory system must be maintained until the effect of the anesthetic drug is lost. This condition occurs in the ICU anesthesiology room. So we need the ability of officers to detect the stability of the respiratory function.

By using the bedside teaching clinical learning method, students will be able to detect the stability of the respiratory system. The bedside teaching method uses Learning by doing approach. Because learning will be more meaningful if children "experience" what they learn, not "know" it (Nurhadi, 2002).

LITERATURE REVIEW:

The clinical learning experience is a process of transformation of students to become professional nurses, which provides an opportunity to adapt to their role as professional nurses in implementing nursing practice in a real setting (Nursalam, 2002). The implementation of professional nursing practices in the real setting of clinical or community health services especially to carry out nursing care, apply the nursing process approach, display professional attitudes or behavior and apply professional skills, statements regarding the clinical guidance experience above are in line with the results of 1999 National Diploma III Nursing curriculum dissemination namely clinical guidance experience is the transformation of students to become professional nurses, which is carried out in the real setting of health services.

The clinical learning methods available to teaching staff are classified according to the main uses of each strategy. The categories include:

1. Experimental
2. Conference
3. Bedside Teaching
4. Nursing round
5. Observation

Bedside Teaching is a method of teaching students that are done beside the client's bed. Includes activities studying conditions and nursing care paln required by the client (Nursalam, 2002).

The principles of the Bedside Teaching method are:

1. Physical and psychological attitudes of the clinical counselors of students and clients.
2. The number of students is limited (ideally 5-6 people)
3. Discussion at the beginning and after the demonstration in front of the client is carried out to a minimum.
4. Continue with the demonstration.
5. Assess students' understanding as soon as possible about what they get at that time.
6. Demonstrated activity is something that has never been obtained by students before, or if students face difficulties applying.

To prepare the Bedside Teaching method, the following steps are needed:

1. Get appropriate cases that can allow students to apply procedural and interpersonal engineering skills.
2. Coordination with staff in the clinic so as not to interfere with the routine care of the client.
3. Completing equipment / facilities to be used.

METHODOLOGY:

This research uses the Pre Experiment design. The form of design used is One Group Pretest - Posttest Design).

Research time and place:

a. Research time

This research will be conducted for two months, April-May 2007.

b. Place of research

This research was conducted at Sidoarjo District General Hospital in ICU Anesthesia Room

The population in this study were students in the ICU Anesthesiology room in March-April 2007 who underwent professional practice totaling 30 students.

The sample in this study was taken as much as possible from the existing population. From students who practice clinics at ICU Anesthesia Hospital Sidoarjo meet the criteria:

a. The subject is willing to be investigated and sign an agreement letter
b. Currently undergoing an emergency professional practice in the ICU room Sidoarjo Hospital.

In this study using the technique of Simple Random Sampling is a sampling technique such that all elements of the population have the same opportunity to be sampled.

The independent variable of this study is the application of bedside teaching. The dependent variable is the level of ability of Nursing DIII students to detect the stability of the respiratory system in ICU Anesthesia Hospital Sidoarjo.

DISCUSSION:

Data analysis technique:

Based on the purpose of this study, data analysis is directed to determine the effect of the application of bedside teaching on the ability of DII Nursing students to detect the stability of the respiratory system in ICU Anesthesia Hospital Sidoarjo. After the data collected cognitive scores multiplied by 5, psychomotor scores are also multiplied by 5, then merging the results of cognitive pretest and psychomotor pretest and the results are divided into two, then tabulation and statistical tests are performed. To find out the difference between samples that were given treatment and those that were not given treatment,

statistical tests were used. T-test Paired data (paired t-test).
Ho is accepted if t count> t table.

1. General Data:

General description of respondents:

Students who were respondents in this study were 23 people obtained from the results of data collection using a questionnaire and checklist.

Characteristics of respondents based on the educational institution, gender, capabilities in Detecting Respiratory System Stability before Bed Side teaching, Ability in Detecting Respiratory System Stability after Bed Side Teaching and Effect of Application of Bed Side Teaching on the Level of Nursing Students' Capabilities in Detecting Respiratory System Stability In the Anesthesiology ICU Room.

Table 1 Distribution of Frequency of Characteristics of Respondents in educational institutions in the ICU Anesthesia Room at Sidoarjo District General Hospital in January-December 2007.

No	Type	F	(%)
1	**Educational Institution**		
	Poltekkes Sidoarjo	14	61%
	Poltekkes Mojopahit	2	9%
	Poltekkes Sutopo	3	13%
	STIKES PPNI	4	17%
	Number of Respondents	**23**	**100%**
2	**Gender**		
	Men	5	22%
	Female	18	78%
	Total	**23**	**100%**
3	**Ability in Detecting Respiratory System Stability Before Bed Side teaching**		
	Satisfying	0	0%
	Good	0	0%
	Enough	0	0%
	Less	16	70%
	Very Less	7	30%
	Total	**23**	**100%**
4	**Ability in Detecting Respiratory System Stability After Bed Side Teaching**		
	Satisfying	9	39%
	Good	12	52%
	Enough	2	9%
	Less	0	0%
	Very Less	0	0%
	Total	**23**	**100%**

Based on Table 1, the majority of respondents based on education institutions came from Sidoarjo Poltekkes as much as 61% (14 people). Characteristics respondents based on the majority of female respondents were 78% (18 people). Characteristics respondents based on the majority of respondents' ability to detect respiratory system stability before bedside teaching is less than 70% (16 people). Characteristics respondents based on the ability of respondents in detecting the stability of the respiratory system after bedside teaching is good, the majority is 52% (12 people).

2. Special Data:

The effect of the application of bedside teaching on the ability level of Nursing DIII students to detect the stability of the respiratory system

Table 2. Effect of Application of Bed Side Teaching on the Level of Nursing Students' Capabilities in Detecting Respiratory System Stability In the Anesthesiology ICU Room

Level Of Capability	Before Deployment		After Deployment	
	Amount	Percentage	Amount	Percentage
Satisfying	0	0%	9	39%
Good	0	0%	12	52%
Enough	0	0%	2	9%
Less	16	70%	0	0%
Very Less	7	30%	0	0%
Total	23	100%	23	100%

Based on Table 2, the effect of the application of bedside teaching on the ability level of Nursing DIII students to detect the stability of the respiratory system in the ICU Anesthesia Room Sidoarjo District Hospital in 2007 experienced a significant increase.

Classification of the level of ability of Nursing DIII students in detecting the stability of the respiratory system Pre and Post bedside teaching in the ICU Anesthesia room Sidoarjo District Hospital 2007.

a. Pretest ability level:

Based on the results of research conducted on 23 respondents who will do bedside teaching 70% of students have fewer categories? Student ability is still lacking before learning bedside teaching.

This is following opinion Purwaningsih, (2000), which states that to achieve the three main functions of nursing higher education a form of a learning experience is developed, which in its implementation constitutes an intact series, mutually supporting one another in making changes in student behavior, not only in theory. Nursalam, (2002), saying in learning theory that learning is using one's intellectual and cognitive abilities.

The ability of Nursing DIII students is lacking before doing bedside teaching because they have not experienced what they learned on campus. Knowledge is not a set of facts, concepts or rules that are ready to be taken and remembered. Students must construct that knowledge and give meaning through real experience. Knowledge grows and develops through experience. Understanding develops deeper and stronger when it is always tested with new experiences. Humans have a knowledge structure in their brains, like boxes that each contain different meaningful information. The same experience for several people will be interpreted differently by each individual and stored in a different box. The level of ability that is less likely to be caused also by a large stressor before students undergo emergency clinic practice in the ICU Anesthesia Room Sidoarjo District Hospital.

b. Posttest ability level:

The level of interest of 52% post-test students got good category scores and 39% got satisfactory categories. This means the ability of students in detecting the stability of the respiratory system after bedside teaching is good.

This is consistent with opinion Nursalam, (2002), which states that the practice environment provides opportunities for students to apply their decision-making skills to the patient's situation as events begin to unfold. Nurhadi, (2002), Saying that learning will be more meaningful if we experience what it is learned, not just knowing it. Anita lie, (2002), Saying that teaching-learning activities must place more emphasis on process than on results. Everyone has potential.

Increasing the level of student ability is also likely due to high motivation to apply the theory learned in education. Many factors cause an increase in the ability of Nursing DIII students to detect the stability of the respiratory system in the ICU Anesthesiology room, including gender; female sex will be more diligent and active in learning; State education agencies enable students to concentrate more in learning and are more motivated in learning. Conducive environmental conditions allow students more concentration in learning.

Analysis of the effect of bedside teaching on the level of ability of Nursing DIII students in detecting the stability of the respiratory system pre and post bedside teaching.

From the results of the analysis of the ability level of students pre and post bedside teaching there are differences. And by using the Paired T-Test and SPSS assistance found T count = 15.984 with α 0.05 while t table = 2.27

so that from this study it can be concluded that there is a significant effect on the ability of Nursing DIII students between pre and post bedside teaching.

Nursalam (2002), suggesting the bedside teaching method of learning will add to the abilities and skills of students in achieving competence in clinical learning experiences. Radia Astuti (2000), Mention that learning with bedside teaching will foster and enhance intellectual abilities, mastery of technology and foster professional attitudes and skills.

The influence of the learning environment with real cases can also improve the ability of students to detect the stability of the respiratory system in the ICU Anesthesia Room at Sidoarjo District Hospital. Effective learning begins with a student-centered learning environment. From the supervisor doing besides the patient, the student watching, to the student taking action and working, the supervisor is directing. Learning must center on how students use their new knowledge. Learning strategies are more important than results. The concept of learning that helps the supervisor link the material taught in the campus to real situations and encourages students to make connections between the knowledge they have and their application in the clinic as a beginner professional nurse who has knowledge and tips in nursing makes a picture of collaboration that harmonizes to realize learning goals. Students need to understand what learning means, what its benefits are, in what status they are, and how to achieve it. Students realize that what they learn is useful for their lives later. That way students position themselves as those who need knowledge for their skills and skills later.

International journals reinforcing research results of researchers :

Lalita Fernandes, Anthony Menezes Mesquita (2018), In this study, Bedside Teaching has significantly improved knowledge and skills in the diagnosis and general management of respiratory diseases in medical students. This research shows that Bedside Teaching can be structured on a needs-based module to succeed in learning when there are time constraints. This module can be replicated to study reproducibility and use in pulmonology and other health disciplines.

Bedside Teaching is a formative experience for doctors and professionals. The ICU environment is conducive to teaching critical thinking skills and demonstrating key communication skills such as empathy Lekshmi Santhosh, Wade Brown, Juliana Ferreira, Abesh Niroula, and W. Graham Carlos (2018).

Bedside Teaching is an important part of inpatient care that contributes to increasing patient satisfaction with better family involvement, care coordination, and care transition Christophe Luthy, Patricia Francis Gerstel, Angela Pugliesi, Valerie Piguet, Anne-Franc Ëoise Allez, Christine Cedraschi (2017).

Bedside Teaching enhances professional behavior, communication skills, and the question and answers approach during a patient assessment Praveen L. Indraratna, Louise C. Greenup, and Timothy X. (2013). Besides, Bedside Teaching enhances clinical reasoning and synthesis, skills that are rarely taught elsewhere. In a cross-sectional questionnaire study not conducted in Australia in 1997, it was found that 100% of respondents (= 136) reported Bedside Teaching as the most effective way to learn clinical skills. The corresponding figure in American research is 90% (= 33), although both are single-institution studies. In addition to enhancing clinical skills, Bedside Teaching also provides valuable preparation for clinical examinations, such as those held by most Australian medical schools in final-level undergraduate examinations and those required for admission to college scholarships. Bedside Teaching is also the best opportunity for clinical teachers

to teach the humanistic aspects of medical care such as empathy, respect, and compassion through role modeling at the bedside.

CONCLUSION:

From the results of this study, it was found that:

1. The level of ability of Nursing DIII students in detecting the stability of the respiratory system in the Anesthesiology Room at Sidoarjo District Hospital before bedside teaching is lacking.
2. The level of ability of Nursing DIII students in detecting the stability of the respiratory system in the Anesthesiology Room at Sidoarjo District Hospital after bedside teaching is good.
3. From the results of the analysis of the pre and post bedside teaching abilities of students there are differences. And by using the Paired T-Test and SPSS assistance found the results of t count = 15.984 with α 0.05 while t table = 2.27 so that the results of this study can be concluded that there is a significant effect on the application of bedside teaching on the ability level of Nursing Diploma III students in detecting the stability of the respiratory system.

LIMITATION AND STUDY FORWARD:

Further studies were hoped this research use more respondents and better measurement tools to obtain a more accurate result.

1. For clinical advisors
   In clinical guidance should use bedside teaching in detecting the stability of the respiratory system. The adviser in assisting should use words that are easy to understand, directly to patients and discussion methods so that the learning delivered can be well received by students and can do the abilities and skills learned in educational institutions.
2. For Sidoarjo District Hospital
   Should conduct supervision and guidance of students who undergo clinical practice and submit to clinical instructors using one of the bedsides teaching clinical learning methods to become a teaching hospital.
3. For further researchers
   We should use more respondents and design and design more accurately. In examining the effect of the application of bedside teaching on the level of ability of Nursing DIII students detects the stability of the respiratory system.

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