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SIMULATION METHOD WITH TRAINING (Drill) ON THE RESULTS OF LEARNING MIDWIFERY CARE IN THE FACULTY OF HEALTH SCIENCEBENGKULU DEHASEN UNIVERSITY

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ABSTRACT

Education is a process of changing the attitude and behavior of a person or group of people in maturing humans through teaching and training efforts. This study aims to determine the difference in the effectiveness of the simulation learning method with drills on the learning outcomes of Midwifery Care II for Midwifery students DIII Faculty of Health Sciences, Dehasen University Bengkulu in 2019. The research design used the pre-experimental method One Group Pretest Posttest method using two methods. different treatment of groups of students. The population was all students in semester III Midwifery DIII Faculty of Health Sciences, Dehasen University Bengkulu in 2019, totaling 30 people. The data was processed and carried out using SPSS. The results showed that there was a difference between the simulation method and the Askeb II learning outcome with a p-value of 0.000, and there was a difference between the training method and the learning outcomes of Askeb II with a p-value of 0.000. The suggestion in this research is that the simulation method can be applied to Midwifery DIII, Faculty of Health Sciences, Dehasen University Bengkulu in 2019 because it has a more positive effect than the training method (drill), so it can improve learning outcomes in the Askeb II course.

Keywords: Simulation Methods, Exercise Methods and Learning Outcomes of Askeb II

INTRODUCTION

Educationis the process of changing the attitudes and behavior of a person or group of people in maturing humans through teaching and training efforts, in a broad sense it is also defined as a process with certain methods so that people gain knowledge, understanding, and how to behave according to their needs. -factors that cause the quality of education to deteriorate. These factors are (1) low quality of physical facilities for physical facilities. (2) the low quality of teachers, the condition of teachers in Indonesia is also very concerning. (3) the low welfare of teachers, the low welfare of teachers has a role in reducing the quality of education in Indonesia. (4) low student achievement, with such circumstances (low physical facilities, teacher quality, and teacher welfare).

Learning outcomes are changes that occur as a result of learning activities that have been carried out by individuals. Change is the result that has been achieved from the learning process. To get learning outcomes in the form of change must go through certain processes which are influenced by factors from within the individual and outside the individual

The simulation learning method is a way of presenting learning experiences by using mock situations to understand certain concepts, principles or skills. Simulation can be used as a teaching method with the assumption that not all learning processes can be carried out directly on the actual object.[17]

The training method is a teaching method by providing skills training to students. The training method is generally used to obtain a dexterity or skill from what has been learned.[14]

Based on the preliminary preliminary studies conducted in The Faculty of Health Sciences, Dehasen University Bengkulu, the author obtained data on the average value of the last 3 years of students through secondary data in 2016, it was found that the score was 74.87 from 41 students, in 2017 there was a score of 73.57 out of 40 students, in 2018 it was found a score of 74 , 09 out of 41 students. For students there was a decrease in learning outcomes in the Askeb II course, where in 2016 it was found that an average score of 74.87 from 41 students in 2017 was found to have an average value of 73.57 out of 40 students in 2018, with an average value of 74 , 09 out of 41 students.

The decline in learning outcomes of midwifery care II for students of the Faculty of Health Sciences at Dehasen Bengkulu University in 2019 will affect the quality of these students and study programs because midwifery care is the basis of knowledge that midwifery students must master. The purpose of this study is to explore effective learning methods with simulation training (drill) on learning outcomes of midwifery care II in Midwifery Study Program students, Faculty of Health Sciences, Dehasen University Bengkulu in 2019.

RESEARCH DESIGN AND METHODOLOGY

The research design used a design with a pre-experimental method. One Group Pretest Posttest is a method of using two different treatments to groups of students.16 The use of a one group pretest postest research design is because the researcher uses an existing class. This research has two variables, namely the dependent independent variable. The independent variable in this study is the simulation method and the training method (drill), while the dependent variable is the learning outcome. The population in this study were all students of level II semester III DIII Midwifery, totaling 50 people.12 Collecting data used in this study were primary data taken from the results of the pretest and posttest.

FINDINGS AND DISCUSSION

The data obtained from each respondent were analyzed univariately.

Table 1 Average Distribution of Respondents According to Pretest and Posttest Results Stage III Active Management Simulation Methods in Midwifery, DIII, Faculty of Health, Dehasen University in 2019

Result Learn	N	Mean	Standard Deviation	Std. Mean Error	P Value
Pretest	25	51.6	10.38	2.07	0,000
Posttest	25	74.8	9.7	1.94	0,000

Source: SPSS 2019 data

From table 1 above, it can be seen that the average pre-test frequency distribution of learning outcomes is 51.6 with a standard deviation of 10.38, which means that the pretest average value is 51.6 and can deviate to 61.98. Meanwhile, the average posttest score is 74.8 with a standard deviation of 9.7, which means that the posttest average score is 74.8 and can deviate up to 84.5.

Table 2 Average Distribution of Respondents According to Pretest and Posttest Results Exercise Methods (drill) KalaIII Active Management in Midwifery DIII Faculty of Health Sciences, Dehasen University in 2019

Result Learn	N	Mean	Standard Deviation	Std. Mean Error	P Value
Pretest	25	52.00	9,12	1.82	0,000
Posttest	25	65.00	9.68	1.93	0,000

Source: SPSS 2019 data

From table 2 above, it can be seen that the frequency distribution of the average pretest learning outcomes is 52.00 with a standard deviation of 9.12, which means the pretest average value is 52.00 and can deviate to 61.12. While the average posttest score of 65.00 with a standard deviation of 9.68 means that the posttest average value is 65.00 and can deviate up to 74.68.

Based on the results of the univariate analysis in table 1 and table 2, it was found that there was an increase where the postest results increased from the pretest results in the simulation method an increase of 74.8 and in the training method (drill) an increase of 65.00.

Statistical test In this study using 2 variables with paired data, the dependent t test was assessed by looking at the mean value at the pretest and posttest of the two samples. This difference is tested with a dependent t test which produces a P value that can be seen in column 2 - tail sig. The test criterion is if P Value <0.05 then H0 is rejected, if P value ≥ 0.05 then H0 is accepted.

Table 3 Distribution of Differences in Pretest and Posttest Results of Stage III Active Management Simulation Methods in Midwifery, DIII, Faculty of Health Sciences, Dehasen University in 2019

Result Learn	N	Mean	Standard Deviation	Std. Mean Error	P Value
Posttest Pretest	25	23.20	12.57	2.51	0,000

Source: SPSS 2019 data

Based on table 3, it is known that the mean value between the posttest and pretest results is 23.20 with a standard deviation of 12.57, which means that there is an increase in pretest to posttest of 23.20 and can deviate up to 35.77. The results of the statistical test show that the p value of 0.000 means P <0.05, it can be concluded that there is a difference in the results of the pretest and posttest learning outcomes based on the simulation method for Midwifery students DIII Faculty of Health Sciences, Dehasen University in 2019

Table 4 Distribution of Difference Between Pretest and Posttest Results Exercise Methods (drill) Class III Active Management in Midwifery DIII Faculty of Health Sciences, Dehasen University in 2019

Result Learn	N	Mean	Standard Deviation	Std. Mean Error	P value
Posttest Pretest	25	13.00	8.77	1.75	0,000

Source: SPSS 2019 data

Based on the results of the bivariate analysis in Table 3 and Table 4, it is found that there are differences in the pretest and posttest learning outcomes based on the simulation and training method (drill) because the value is 0.000. And the simulation method is more effective than the drill method because in the simulation method there is an increase of 23.20 while in the training method there is an increase of 13.00.

DISCUSSION

Learning outcomes

Learning outcomes are certain competencies or abilities both cognitive, affective, and psychomotor that are achieved or mastered by students after participating in the teaching and learning process.

Learning outcomes are the result of learning activities that have been carried out by individuals. Change is the result that has been achieved from the learning process. So, to get learning outcomes in the form of "change" must go through certain processes that are influenced by factors from within the individual and outside the individual. The process here cannot be seen because it is psychological. Unless someone has been successful in learning, that person has experienced a certain process in learning. Therefore, the learning process that has occurred in a person can only be concluded from the results, because of the learning activities that have been carried out. For example, from not knowing to knowing, from not understanding to understanding and not being knowledgeable to being knowledgeable, and so on. 14

We can differentiate the factors that affect student learning into two types: internal factors (factors from within students), namely the physical and spiritual condition of students and approach to learning factors, namely the types of student learning efforts which include strategies and The method used by students to carry out activities to study the subject matter. 7

The criteria for evaluating learning outcomes are as many as possible as many as the lecturer who gives the score. One of the things that is generally agreed upon is explaining the meaning of the grades given to students. At the very least, grades should inform the standard self-esteem of the subject matter of a subject. 4

Learning outcomes tests can be divided into two types, namely (1) a formative test is a test that is held before or during learning. The formative test has two objectives, namely helping lecturers to make plans and helping students regarding aspects that need to be addressed. (2) summative tests are held at the end of all teaching and learning activities. Its purpose is to inform students and lecturers about how far they have come during the quarter or semester. 4

Simulation Learning Methods

The simulation teaching method is a way of presenting learning experiences by using mock situations to understand certain concepts, principles or skills. Simulation can be used as a teaching method with the assumption that not all learning processes can be carried out directly on the actual object.17 The simulation method is one of the teaching methods that can be used in group learning. The learning process that uses simulations tends to be the object not an actual object or activity, but a mock teaching activity. Students will be nurtured their abilities related to interaction and communication skills in groups. In addition, in the simulation method students are invited to role-play several behaviors that are considered in accordance with the learning objectives. 2

The simulation learning method is a way of presenting learning experiences by using artificial situations to understand certain concepts, principles or skills in carrying out certain simulations.

Simulation can be used as a teaching method with the assumption that not all learning processes can be carried out directly on the actual object. Rehearsal is an example of similai, which is to demonstrate the process of a certain ceremony as an exercise for the actual ceremony so that it doesn't fail in time. Thus Rehearsal is also to develop an understanding of

demonstrating the process and appreciation of an event, the use of simulation methods will be very useful.

There are several characteristics of simulation strategies: (1) learning activities not on actual objects, (2) group activities, (3) community activities, (4) alternatives to attitude learning, (5) the role of the teacher as a guide, (6) there are topics problems, (7) there is a role that students need to play. 2

In order for the use of simulations to achieve the expected goals, in practice, pay attention to the principles, namely (1) the simulation is carried out by a group of students and each group has the opportunity to carry out simulations that are the same or different. (2) all students must be involved according to their role. (3) determining the topic can be discussed together. Simulation instructions must be prepared in detail or in broad outline, depending on the shape and purpose of the simulation. (4) the simulation activity should cover all learning domains, both cognitive, affective and psychomotor. (5) simulation is a skill training in order to face reality well. (6) The simulation must describe the complete situation and sequential processes that are expected to occur in the real situation.

According to the researchers' assumption that the method used in group learning is related to interaction and communication skills. The learning process uses the simulation method not on actual objects or activities, but on pretend teaching activities. Therefore, the teaching and learning process becomes more effective and interesting.

Based on the research results of the pretest and posttest results of learning based on the training method (drill) of the DIII Midwifery students of the Faculty of Health Sciences, Dehasen University in 2019, it is known that the increase between the pretest and posttest results is 13.00. The results of statistical tests show that the p value of 0.000 means $P < 0.05$, it can be concluded that there is a difference between pretest and posttest learning outcomes based on the training method (drill) of Midwifery students DIII Faculty of Health Sciences, Dehasen University in 2019.

In line with Mulati's 2014 research results in her journal entitled "The difference in the effect of the simulation method with drill on the application of partograph filling," the results of this study indicate that there is a significant difference in effect between the simulation method and the training (drill). The statistical test results obtained p-value 0.001 ($\alpha = 0.05$), where the simulation group is more influential than the exercise group (drill) .8

According to Rahayu in 2013 in her journal entitled "the effect of the training method (drill) on student learning outcomes on the basic competencies of adjusting journals" based on the t-

test calculation, the value obtained by t table 1.6679 and tcount 1.7551. These results can be concluded that there is a positive effect of the drill method on student learning outcomes on the basic competencies of adjusting journals. 10

Exercise Learning Method (drill)

The training method is a good way of teaching to instill certain habits. Also as a means of maintaining good habits. In addition, this method can also be used to obtain dexterity, accuracy, opportunity, and skills.14 The training method (drill) is a technique that can be interpreted as a way of teaching where students carry out training activities, so that students have dexterity or skills. which is higher than what has been learned. 11

The training method is a teaching method by providing skills training to students. The training method is generally used to obtain a dexterity or skill from what has been learned. This method aims to form automatic habits or patterns in students, but the weakness of the training method is that it does not develop students' talents / initiative to think.

In the use of drill learning, there are several principles that must be considered: Students must be given a deep understanding before certain exercises are held, Exercise for the first time should be diagnostic, The training period is relatively short, but must be done frequently, Training for the first time should be be diagnostic, The training period is relatively short, But must be done frequently, At the time of training essential processes must be carried out, In training the first of which is accuracy, speed and in the end both must be achieved as a unit and Exercise must have meaning in order broader behavior. 5

In carrying out learning with the training method (drill), the teacher must consider the readiness of the teacher, students and all supporting facilities. Steps in using the drill methodThis consists of several stages, namely (1) the preparation stage, there are several things that are done, namely formulate the goals that must be achieved by students, clearly define the skills specifically and in sequence, determine a series of movements or steps that must be done to avoid mistakes, carry out activities pradrill before fully implementing this method. (2) The implementation stage is an opening step, namely several things that need to be carried out by the teacher including suggesting goals that must be achieved, the forms of training that will be carried out include Starting with simple things first, Creating a pleasant atmosphere, Ensuring that all students are interested in participating, Give the opportunity / to students to continue practicing, When the exercise is complete, then the teacher must continue to provide motivation for students to continue doing the exercises continuously so that the

exercises given can be more attached, skilled and accustomed. (3) Closing by implementing improvements to the mistakes carried out by students and providing calming exercises. [14]

According to the researchers' assumption that how to teach by providing exercises on what students have learned so as to acquire a certain skill. Therefore, the learning process using the training method will improve students' understanding of the lessons received because they often do exercises.

Based on the results of the Paired samplel T-test output, based on the above output, the Sig. 0.000 <0.05, then according to the decision making in the Paired samplel T-Test, it is concluded that there is a difference in the effectiveness of the simulation learning method with training (drill) on the learning outcomes of midwifery care II for Midwifery Students DIII Faculty of Health Sciences, Dehasen University in 2019.

In line with Mulati's 2014 research results in her journal entitled "The difference in the effect of the simulation method with drill on the application of partograph filling," the results of this study indicate that there is a significant difference in influence between the simulation method and the training (drill). The statistical test results obtained p-value 0.001 ($\alpha = 0.05$), where the simulation group is more influential than the training group (drill). According to Rahayu in 2013 in her journal entitled "the effect of the training method (drill) on student learning outcomes on the basic competencies of the adjusting journal" based on the t-test calculation, the value obtained by ttable 1.6679 and tcount 1.7551. These results can be concluded that there is a positive effect of the training method (drill) on student learning outcomes on the basic competencies of adjusting journals. 8

The simulation teaching method is a way of presenting learning experiences by using mock situations to understand certain concepts, principles or skills. 14

Simulation can be used as a teaching method with the assumption that not all learning processes can be carried out directly on the actual object. 17

The simulation method is one of the teaching methods that can be used in group learning. The learning process that uses simulation tends to be the object not the actual object or activity, 6

The simulation method is one of the teaching methods that can be used in group learning. The learning process that uses simulations tends to be the object not an actual object or activity, but a mock teaching activity. Students will be nurtured their abilities related to interaction and communication skills in groups. In addition, in the simulation method students

are invited to role-play several behaviors that are considered in accordance with the learning objectives. 2

The training method is a good way of teaching to inculcate certain habits. Also as a means of maintaining good habits in carrying out learning with the teacher training method, the teacher must consider the readiness of the teacher, students and all supporting facilities. In addition, this method can also be used to obtain dexterity, accuracy, opportunity, and skills. 14 The training method (drill) is a technique which can be interpreted as a way of teaching where students carry out training activities, so that students have dexterity or skills that are higher than what has been learned.

According to the researcher's assumption that the Simulation Method can be applied to Midwifery DIII, Faculty of Health Sciences, Dehasen University in 2019because it has a more positive effect than the training method. Students can do the simulation method in groups and can exchange ideas between students with one another, so that students understand and understand the material more easily. This can improve student learning outcomes in the Askeb II course, especially when delivering material in class.

CONCLUSION

Based on the results of research conducted by 50 respondents regarding the Effectiveness of Simulation Methods and Training Methods (Drill) on Learning Outcomes of Midwifery Care II Semester III Midwifery students DIII Faculty of Health Sciences, Dehasen University in 2019.

In accordance with the theoretical review, discussion and data processing carried out using the SPSS program, researchers can draw conclusions about the effectiveness of simulation methods and training methods (drill) on the learning outcomes of midwifery care II semester III Midwifery students DIII Faculty of Health Sciences, Dehasen University in 2019 as following:

The mean value between the pretest and posttest results is -23.20 with a standard deviation of 12.57, which means that there is an increase in pretest to posttest of 23.20 and it can deviate up to 35.77. The results of statistical tests show that the p value of 0.000 means P <0.05, so it can be concluded that there is a difference in the results of the pretest and posttest learning outcomes based on the Simulation Method of the DIII Midwifery students, Faculty of Health Sciences, Dehasen University in 2019, the mean value between the pretest and posttest results is -13.00 with a standard deviation of 8.77 means that there is an increase in pretest to

posttest of 13.00 and it can deviate up to 21.77. The results of statistical tests show that the p value of 0.000 means P <0.05,

Suggestion

Suggestions for Midwifery DIII, Faculty of Health Sciences, Dehasen University in 2019 It is expected to facilitate other types of cooperative learning in addition to the simulation learning method, so that it can improve learning outcomes in all courses at Midwifery DIII, Faculty of Health Sciences, Dehasen University in 2019.

REFERENCES

1. Aziz A. Education According to Unesco. (Accessed 10 October 2019)http://atikatikaaziz.blogspot.co.id/2010/09/4-pilar-pend Pendidikan-menurut-unesco-html; 2010.
2. Charles. Definition of Simulation Method. (Downloaded on 19 October 2019)http://charlesmalinkayo.com/2012/11/pengentuk-metode-simulasi-dalam.html; 2012.
3. Deni K. Thematic Integrated Learning. Bandung: Cv. Alfabeta; 2014.
4. Haryu I. Educational Psychology. Jember: Learning Library.http: // www. News of the week. com / 2012/12 / understanding-method-simulation.html; 2019.
5. Indra. Understanding Learning Methods.http://www.gudangartikelpend Pendidikan.blogspot.co.id/2011/artikel-pembelajaran-princip-dan.html; 2019.
6. Irwan. Definition of Simulation Method.http://www.gudangartikelpend Pendidikan.blogspot.co.id/2012/12/pengentuk-metode-simulasi.html; 2019.
7. Muhibbin S. Educational Psychology. Bandung: Pt. Rosdakarya youth; 2014.
8. Begin. The difference in influence between the simulation method and practice (drill). Surakart Health Polytechnic; 2014.
9. Nursalam. Concept and Application of Nursing Research Methodology. Jakarta: Salemba Medika; 2011.
10. Rahayu. The positive influence of the training method (drill) on student learning outcomes on basic competencies. Indonesian education university; 2013.
11. Roestyah. Teaching and Learning Strategies. Jakarta: Rineka Cipta; 2013.
12. Rusmiati. Application of simulation methods in social studies learning. State University of Malang; 2009.
13. Saifudin A. Reliability and Validity. 4th Edition Yogyakarta: Learning Library; 2012.
14. Saiful B. Educational Psychology. Jakarta: Pt. Rineka Cipta; 2008.
15. Soekidjo N. Health Research Methodology. Jakarta: Rineka Cipta; 2010.
16. Sugiyono. Educational Research Methods. Bandung: Alfabeta; 2007.
17. Wina S. Learning Strategy. Jakarta: Kencana; 2013.
18. Yeni Y. Askeb II Syllabus. http://yeniyulindarakuti.blogspot.co.id/2013/silabus-askeb-ii.html; 2019.
19. Yulianto. Education According to Unesco.
    1. http://179bsmpnturi.blogspot.co.id/2013/01/4-pilar-pend Pendidikan-menurut; 2013 unesco-and-5.html; 2019.