The Influence of Student Teams Achievement Division Learning Method Toward the Accuracy of Partograph Documentation on Students in Diploma Study Program of Midwifery

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Abstract---Background:The essential aspect ofthe learning system is implementingthe learning method; withthe proper method, the teaching and learning process will be more precise, effective, and efficient. Whereas the dissociated and uncreative learning methods will contribute to the low comprehension material on students. Virtually, various methods can be implemented to escalate students'

comprehension in the teaching and learning process; one of those methods is the STAD (Student Teams Achievement Division), which focuses on active learning patterns through Student-Centered Learning. This method teaches students about collaboration, responsibility, interaction, trust, decision making, communication, and conflict management. Objectives:The focal point of this study is to determine the influence of the STAD(Student Teams Achievement Division) learning method on the accuracy ofpartograph documentation. Method: This study uses a Quasi-Experimental design with a Pretest-Posttest Design. The sample in this study consists of 30 students taken fromthe Quota Sampling technique. This study implementsthe Wilcoxon test to analyze the data. Results: The Student Teams Achievement Division learning method significantly influences the accuracy of partograph documentation with a p-value of 0.000 < 0.05. Conclusion: The implementation of the Student Teams Achievement Division learning method can improve student skills in partograph documentation.

Keywords---achievement division, learning method, partograph, student teams.

Introduction

The learning method is a strategy or technique used by educators to interact with students (1). A proper learning system should provide a good learning experience for students (2). Learning method focuses on increasing learning motivation, learning attitude, thinking critically, and achievingoptimal learning outcomes (3). The most recent learning method is the lecture method, which uses PowerPoint where lecturers are more active during the learning process. Non-interactive and innovative learning methods are considered aspects of material incomprehension (4). In considering several methods used in learning programs, it highlights the STAD learning method as a compelling, interactive, and innovative method thateducators can use to improve students learning comprehension (3).

STAD (Student Teams Achievement Division) is a learning method that focuses on active learning patterns through Student-Centered Learning this method promotes cooperation, responsibility, interaction, trust, decision making, communication, and conflict management in the teaching-learning process (5). This method also can assist teachers in implementinga cooperative approach6. Further, the implementation of the STAD learning method provides discussion activity to actuate students' participation, improve individual achievement, critical thinking, diligence, and patience (7). It also increasesstudents' commitment, provides less competitive8, and trains students to be peer tutors for their friends (9). The "The Learning Pyramid" theory states that peer-tutor or teaching to others can be the most effective method to learn where the results in a retention rate are 80-100%. In contrast, the least effective way of learning is reading or listening methods, which only results ina 5-10% retention rate (10).

Based on the Indonesian Midwives competency in accordance to the Ministry of Health No. 369/MENKES/SK/III/2007, it states that two of the basic skills of midwives areto monitor the progress of childbirth using a partograph (11), and operate it as a decision-making tool (12). Silvia (2020) reveals the compliance of private practice midwives in operating partograph, and there are 63.6% of the midwives who did not comply in filling out the front and back sheets of the partograph completely (3). Aligned with the result, Pujianti (2019) elaborates that it is due to the lack of knowledge, attitude, and motivation (14). Further, documentation becomes the legal basis for midwives in providing services13. It is supported by Haile et.al (2020) that states out of 18 parameters, only 10 parameters were recorded entirely. It proves that the use of the partograph is relativelylow, underrated, and has incomplete records (16). For example, in Ethiopia, the level of utilization of partograph is on a poor level (17). In a partograph record, midwives are mostly inconsiderate about the Maternal temperature18. This incompetence of utilizing the partograph properly in childbirth may contribute to the difficulty in detecting problems and complications on the patient (19). Conversely, the appropriate use of the partograph can assist, manage, and detect the complication and its referral (20). To be more capable of utilizing partograph material, the lecturer needs to implement appropriate learning methods so that students are not bored and motivated to learn (4). The appropriate and efficient learning methods can help midwifery students comprehend the steps for filling out the partograph, improve their application skills, and reduce the MMR and IMR (21).

Method

Research location and design

Conducted at the Health Polytechnic of the Ministry of Health Gorontalo, this research implements a Quasi-Experimental study with Pretest-Posttest Design without a control group.

Population and sample

The research takes all students (97 students) of the third semester at the Health Polytechnic of the Ministry of Health Gorontalo as the population. The samples in this research are 30 students selected using the Quota Sampling technique.

Data collection and analysis method

This study uses a pretest and a posttest approach. Before the intervention, a pretest is conducted for each respondent. Further, respondents are divided into five groups where each group consists of six students, and those groups have two times intervention of the STAD learning method.The respondents were divided by lecturer into five groups consisting of six people. After a discussion, the lecturer chooses one member of the group to present the results of the partograph documentation. The lesson lasts for two hours or 120 minutes. After giving the intervention, a posttest is conducted to see the accuracy of the partograph documentation on each respondent. The measuring instrument used in this research is the partograph. At the same time, the data analysis implementedthe

Wilcoxon test due to the categorized data and paired data groups aim to determine the influence of the STAD learning method toward the accuracy of partograph documentation.

Results

Characteristics of respondents

The characteristic of the respondents in this study is age. From the results of data collection through research instruments, it obtains:

Table 1
Description of respondents' characteristics

Age Characteristics	STAD Learning Method	
	n(30)	%
18 years old	0	0
19 years old	26	86.7
20 years old	4	13.3

Table 1 shows that most of the respondents are at the age of 19 years old or equal to 86.7%, and the rest 13.3% are respondents aged 20 years old.

Univariate analysis

Table 2
Measurement of Respondents' Skills
Before and After Treatment

Skill Measurement	STAD Learning Method	
	n(30)	%
Pretest		
incorrect	29	96.7
fairly correct	1	3.3
correct	0	0
Posttest		
incorrect	0	0
fairly correct	25	83.3
correct	5	16.7

Frequency-Distribution

Table 2 shows that 29 respondents proceed with the incorrect partograph documentation in the pretest. However, 25 respondentshave fairly correct partograph documentation in the posttest. The classification of the respondents is based on three categories, incorrect (score <75), fairly correct (score 75-99), and correct (score 100).

Bivariate analysis

Table 3
The Influence of STAD Learning Method on the accuracy of
Partograph Documentation

STAD method	n	Negative Rank	Positive Rank	Ties	Sig.
Pretest Posttest	30	0	29	1	0.000

Wilcoxon test

Table 3 shows that 29 respondents improved their scores, and one respondent's score remained the same (fixed score) compared to the pretest with a p-value 0.000 <0.05.

Discussion

The majority of respondents (86.7% (n=26))in this research are 19 years old. Age affects how somebody solves problems and makes decisions14. Piaget supports the idea withthe theory of cognitive development, where a person can reach the formal operational stage at the age of 15-20 years old. At those ages, students can understand concrete and abstract thinking concepts 22. Therefore, those theories strengthen and answer the surmise that people of 18-20 years old are quite mature in receiving various information. The STAD can also be defined as the SCL (Student Centered Learning) learning method where students are required to actively contribute during the learning program either personally or in groups 23. The purpose of having group division before and during the learning session is to optimize learning material distributionin the group24. This study indicates that the STAD learning method effectively influences the accuracy of partograph documentation in maternity and newborn midwifery care subject with a p-value of 0.000 < 0.05. The statistical tests also show the probability of Z < 5% (0.007), which proved that implementing the STAD learning method can improve students' learning outcomes. This result is aligned with the explanation of Novita (2016) that the implementation of the STAD method provides better learning outcomes for students25.

The cooperative learning of the STAD method allows group members to cooperate and help each other (26). In the group discussion process, the lecturer will become a facilitator to optimize students' critical thinking. Moreover, skills, collaboration, and design in group learning can increase student activity in cognitive, affective, and psychomotor (24). From the findings, there are several advantages gained from implementing the STAD learning method. First, it helps students to enhance their social skills besides cognitive skills. Further, it helps the lecturer be more focused as a facilitator, mediator, motivator, and evaluator. Lastly, it helps students comprehend two learning responsibilities; learning for themselves and assisting their friends to learn (27). Learning methods can be interpreted as achieving learning objectives28. Implementing the learning process through practice can provide better learning outcomes for students than a monotone learning process in the classroom. It helps students experience the authentic atmosphere of being paramedics (29).

The findings and complex analysis show that 96.7% (n=29) of respondents experienced an increase after the treatment. It is occurred because of the provision of materials implemented STAD method during the learning process. Besides, group learning students in STAD method helps students to discuss, decide, and determine the steps in partograph documentation. This result aligns with Rismawati's (2015) theory that the STAD learning method can enhance learners'cooperation, trust, responsibility, interaction, decision making, and conflict management of learners5. In addition, it can help students and lecturers exchange information (30).

Although there wasa significant increase after the intervention, most of the respondents only experienced an increase in 1 category; the inappropriate category with<75 had changed into quite appropriate with a score 75-99. It is likely to happen because the lecturer's group division did not meet students' expectations. It may lead to the incommensurate collaboration of group members. In contrast to the advantage, STAD Learning Method requiresthe remarkable ability to carry out cooperative learning. It becomes challenging due to students' characteristics, such as being cooperative (27). Referring to the findings, researchers assume that the *StudentTeams Achievement Division*is compatible to be used in partograph learning programs of maternity and newborn midwifery care courses. However, it needs frequent meetings to improve student skills in utilizing and documenting through partographs.

Conclusion

The implementation of the Student Teams Achievement Division (STAD) learning method efficiently influencesthe accuracy of pertograph documentation. There is a remarkable result on respondents' scores before and after the STAD learning methodwas applied.

Acknowledgement

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