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# THE EFFECT OF FIRST AID SKILLS TRAINING ON SITUATIONAL SYNCOPE STUDENTS

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# **ABSTRACT**

Situational syncope is a condition where the loss of consciousness is sudden, temporary and recovery is spontaneous, first aid is taken by students to the PMR and UKS rooms. The better your knowledge of first aid, the faster you will be able to carry out first aid measures. Efforts are being made to increase knowledge with skills training. The aim is to improve the first aid skills of Situational Syncope students and determine the effect of training on the first aid skills of Situational Syncope students. Quasi Experiment Design, One Group Pre-test-Post-test Design, 1 treatment group. The number of respondents was 30 people. The time of the research was January 2024. The research subjects were fifth grade students at SDN 7 Rejang Lebong. Their long experience as a PMR member was adjusted to the predetermined criteria. This research uses primary data from fifth grade students who are willing and agree to be respondents. The results of statistical tests obtained correlation values through pre and post resulting in a value of 0.428, a sufficient and positive relationship. Probability value/p value of the Paired T test: 0.123, meaning there is no difference between before and after treatment because the p-value is > 0.05 (95% confidence that there is no difference before and after implementation among research respondents on the effect of first aid skills training on students with situational syncope. It is recommended to plan special routine UKS training activities regarding first aid for students with situational syncope.

KEYWORDS: Training, skills, students Situational syncope.

# INTRODUCTION

Skills education is a dynamic process of behavior change, where the change is not just a process of transferring material or theory from one person to another and is not a set of procedures, but this change occurs because of awareness within the individual, group and society itself.

Orthostatic hypotension is one of the clinical manifestations of and has been identified as an independent risk factor for cardiovascular morbidity and mortality. Orthostatic hypotension is defined as a decrease in systolic blood pressure of 20 mmHg and/or diastolic blood pressure of 10 mmHg. This response is a

change from a lying position to a standing position. The prevalence of orthostatic hypotension in diabetic patients varies between 8.2% to 43% depending on the diagnostic criteria and selection of study subjects. [18]

Syncope is a relatively harmless problem, but in some cases it is associated with underlying cardiovascular problems and carries a risk of sudden death. Types of vascular syncope, cardiac syncope, neurological or cerebrovascular syncope, metabolic syncope and situational syncope. [5] Syncope usually occurs suddenly. Syncope can be caused by the sufferer being in the hot sun for too long. [2] Mild symptoms that often occur in sufferers of syncope or fainting are general fatigue,

headache or dizziness, dizzy eyes, thirst, shortness of breath and shortness of breath. Fainting or syncope can also be caused by external illness (weather, wind, heat) or internal illness, namely emotion or shock. [15]

Simulation can be used as a teaching method with the assumption that not all learning processes can be carried out directly on objects. [11] Knowledge is a very important domain for forming first aid actions/skills. The better a person's knowledge about first aid, the better a person will be at carrying out first aid measures in the field. One effort that can be made to increase knowledge related to first aid is by conducting health education. [12]

First aid is an immediate action for someone who is experiencing pain or injury. Often students do not know the correct first aid measures for students who have fainted. Students' lack of experience with first aid means their experience is also lacking. However, it does not rule out the possibility that students will know first aid for fainting, however have no experience providing first aid to unconscious victims.<sup>[3]</sup>

First aid is influenced by several factors such as age, gender, attitude, lack of knowledge, training and experience related to first aid. [9] Handling when student syncope occurs can be done by providing first aid, which must be done quickly and precisely even if it is only basic medical assistance. [8] Medical assistance can be provided based on medical knowledge that is known to many people. Delays in providing first aid will have serious impacts on students, such as life-threatening injuries. The impact that occurs on students who experience fainting is that students will miss lessons at school because they have to rest at the School Health Service (UKS) and many students do not pay attention to their health condition, so they lose consciousness. [13]

Situational syncope is a condition when a person suddenly loses consciousness which is triggered by a certain situation. Generally, this condition is only temporary and recovery can occur spontaneously, [17]

Syncope (fainting) is a temporary loss of consciousness due to inadequate brain perfusion. [17] Based on the results of research and interviews, it is known that according to the informant, the description of teachers' knowledge about syncope incidents is being able to know, understand, apply, analyze and evaluate syncope incidents that occur in students at school.<sup>[4]</sup> Based on a preliminary survey that was carried out at SDN 7 Rejang Lebong by interviewing several students, information was obtained that the number of class V students was 30 people. Based on the results of the interview, the results showed that those who provided assistance were students who were members of the UKS or school health, and the method of assistance they provided was taking students who had fainted to the school health room, putting them to bed, loosening their clothes, giving them smells, so that they would quickly regain consciousness.

Preliminary survey and processing of independent research permits, carried out Thursday 4 January 2024, there were 1-2 cases of fainting at SDN 7 Rejang Lebongo in 1 month, fainting often occurs in students at school. Students fainted while attending a flag ceremony at school because they did not have breakfast and were exposed to the hot rays of the sun. Fainting incidents usually occur in schools such as elementary, middle, high school or other schools that hold routine ceremonies every Monday. The reference above has stated that situational syncope often occurs because sufferers are exposed directly to sunlight, therefore it is necessary to provide skills training in handling cases of situational syncope that occur in other students at school to improve skills in training on first aid for fainting students at SDN 7 Rejang Lebong."

Based on the background above, the research problem formulation is interested in conducting research on "The effect of first aid training on situational syncope students in class V at SDN 7 Rejang Lebong." The aim was to determine the effect of training on first aid skills in situational syncope students.

#### **METHOD**

The research design used is a Quasi Experiment design. The research design is One Group Pre-test-Post-test Design, 1 treatment group. The number of respondents was 30 people. The research began on January 6 2024. The sample for this research was class V students at SDN 7 Rejang Lebong, with long experience as PMR or (red Cross teen) members according to predetermined criteria. This research uses primary data from fifth grade students who are willing and agree to become respondents.

The instrument used in this research used a student skills questionnaire in handling student cases of situational syncope. The readiness questionnaire contains 30 questions with ready and not ready answers, these questions are made in 2 types, namely favorable (positive) and unfavorable (negative). Favorable (positive) questions consist of 25 questions and unfavorable (negative) questions consist of 5 questions.

Students' readiness level scores are categorized: Ready, if the respondent's score is  $\geq$  cut off point (52) and Not ready, if the respondent's score is < cut off point (52). The cut off point value (52) was obtained from the median normality test using Shapiro-Wilk with 30 respondents. This research was conducted for 3 days. On the first day the researcher introduced himself, the time contract and provided information related to the research including the objectives, benefits, research procedures for potential respondents and providing informed consent for those willing to become research respondents. Then, after the respondent signs the informed consent, the researcher will conduct a pre-test with a questionnaire sheet on readiness for the first treatment of syncope in the form of questions with yes and no answers, then at

the second meeting (one day after the pre-test) followed by providing education on situational syncope and students are divided into 4 original group, different material is divided into each group, each member is responsible for mastering part of the learning material, then at the third meeting (three days after giving situational syncope education using the jigsaw method) a repeat measurement (post test) is carried out with the same questionnaire time before treatment (pre test) as data collection to determine the level of readiness for the first treatment of fainting. Data processing is carried out using a computer through editing, coding, tabulating and data entry processes.

In carrying out the research stages there will be 3 evaluations through 3 meetings to obtain results, namely evaluation of knowledge and abilities, evaluation of facilities and infrastructure support, and evaluation of plans and follow-up. The following research stages can be seen in table 1.

Table 1: Research Stages.

Number	Research Stages
1	Instrument Making
2	Collect data on class V students at SDN 7 Rejang Lebong who are UKS members according to the inclusion criteria.
3	Determine respondents as the intervention group.
4	Assessment of respondents who will be given the questionnaire
5	Carry out assessments according to the instrument.
6	The results of the assessment will then be collected and then grouped and checked one by one to see the results of providing first aid training in cases of situational syncope.
7	Instrument Making

Table 2: Targets and outcomes.

Targets	Outcomes
Conduct knowledge screening on providing first aid training to class students V SDN 7 Rejang Lebong, to find out students' basic knowledge about handling situational syncope cases.  Conduct first aid training for class V students at SDN 7 Rejang Lebong to provide basic knowledge to class V students about basic aid that students can do when situational syncope occurs, to reduce the risk Providing simulations of conducting training. Helping directly and first aid at the level of handling providing first aid at basic situational syncope students to apply knowledge that has been obtained and so on exercises carried out so that class VI students can immediately provide first aid to students with situational syncope at a basic level.	Increase basic knowledge and skills for class VI students who can provide first aid in cases of situational syncope, when help is not yet available Improve students' abilities in apply skills from first aid training to basic level management of situational syncope students students Situational syncope at a basic level, to reduce the risk.

### RESULTS

This research was carried out starting on January 6 2024, in 3 meetings with class V students at SDN 7 Rejang

Lebong. The number of samples obtained was 30 people with table 3 below:

Table 3: Frequency Distribution of Class V Students at SDN 7 Rejang Lebong.

Age (years)	Frekuensi	
10	8	
9	17	
8	5	
Amount	30	
Gender	Frekuensi	
Women	11	
Man	19	
Amount	30	
Long time as UKS officer	Frekuensi	
1,5 years	11	
1 years	9	
5 months	6	
2 months	4	
Amount	30	

Based on table 3, the highest results show that the sample aged 9 years was 17 students (56.6%) and the lowest was 8 years old, namely 5 students (16.67%). The majority of the sample gender was male, 19 students (63.33%), while there were 11 students (36.67%) female. The majority of the sample had been red Cross teen officers for the longest 1.5 years as many as 11 students (36.67%), and those who had just started becoming red Cross teen officers were 4 students (13.33%).

Table 4: Level of Students' First Handling Skills for Situational Syncope.

Skills	Frekuensi (F) Presentase	
Before Training		
Ready	10	33.3
Not Ready	20	66.7
After Training		
Ready	30	100.0

Based on table 4, it can be seen that the level of first handling skills of situational syncope students before fainting handling skills training in this study was that the majority were in the not ready category, namely 20 respondents (66.7%). And only 10 respondents (33.3%) were ready.) at the first level of handling skills in cases of situational syncope students, after skills training, all 30 students (100%) became ready.

Table 5: Statistical Test Results.

	Mean	Std. Deviation	Korelasi	p-value
Pre test	3.4400	1.08321	0.428	0.123
Post Tes	3.9200	1.60520	0,426	0,123

Based on the results of statistical tests in table 5, the results obtained are that the correlation value carried out by respondents between the 2 Pre and Post test variables produces a value of 0.428, a sufficient and positive relationship. The result of the probability value or p-value of the Paired T test = 0.123, which means there is no difference between before and after treatment, because the p-value is > 0.05 (95% confidence), there is no difference before and after implementation in respondents of the influence research first aid skills training in students Situational syncope.

#### DISCUSSION

Based on the results of statistical tests, the correlation value obtained through pre and post produces a value of 0.428, which means the relationship is sufficient and positive and the results of the Paired T test show that there is no difference before and after implementation in the form of training for respondents on research on the effect of providing first aid training to students with situational syncope at the level elementary school, fifth grade students at SDN 7 Rejang Lebong, Central Curup District. The results of research<sup>[10]</sup> also showed that as many as 16 respondents had poor knowledge and as many as 4 respondents had good knowledge about first aid for handling situational syncope. This shows that the

level of knowledge of Youth red Cross teen students in first aid for handling situational syncope is still in the poor category.

After observing and visiting three times in class V of SDN 7 Rejang Lebong, Central Curup District. Researchers checked the equipment in the red Cross teen and UKS or school health rooms. There were eucalyptus oil, bandages, plaster, betadine, ORS, scissors, triangular cloth and spalk, so it could be declared suitable for basic aid equipment. The location is next to the classroom and near the road, and in front of the gate of SD 7 Rejang Lebong there is the Perumnas Health Center, making first aid mobility easier.

The results of this study are not in line with the results of research<sup>[5]</sup> which showed that there was a significant influence on the abilities of red Cross teen members before and after treatment, p=0.00 with a mean increase of 32.66. Syncope first aid training is an effective method of delivering information to improve the skills of red Cross teen members in providing syncope first aid. It is hoped that syncope first aid training will be carried out regularly, especially for red Cross teen members, because red Cross teen members are role models in healthy living behavior and can provide motivation for healthy living behavior and also as educators of other teenagers. This research is also not in line with the results of first aid skills education activities at Synscope which were attended by 51 students. 98% of students were able to repeat syncope handling skills, while 2 students did not attend school. [1]

Research<sup>[16]</sup> also shows that the results of the analysis of the respondents studied, the treatment of syncope after being tested using the Wilcoxon test showed that from 40 respondents a p-value of 0.000 < 0.05 was obtained. The results of this research show the influence of syncope management training on the handling of syncope in the red Cross teen Team at SMAN 5 Jember. It was recommended for this research to the red Cross teen Team at SMAN 5 Jember to improve the handling of syncope at SMAN 5 Jember. The results of his research using the Wilcoxon signed rank test (The Signed Rank Test) obtained a significance value of 0.001 < 0.05indicating that there was an influence of health education and simulation on first aid knowledge and skills in students who experienced syncope at SMA 7 Manado. [9] Not in line with either research. [7] The results of the research stated that there was an influence of syncope education using the jigsaw method on the level of readiness for the first treatment of syncope among students majoring in nursing assistants.

In line with research<sup>[19]</sup>, the results of SMP N 5 students were able to understand how to provide first aid to syncope sufferers.

There are several factors that cause the results of this research to be less significant, namely 11 students

(36.67%) with more than 1.5 years of experience as red Cross teen officers, while 4 students (13.33%) have just started to become red Cross teen officers, which makes the respondents already know the answer to the question, the research location cannot accommodate more than 25 people, so it is too crowded, the research hours coincide with lunch time, thus making the research situation not conducive. Research by Nugroho, et al (2017) states that skills in providing first treatment for syncope students are not only influenced by knowledge but there are other things that contribute such as motivation and interaction. [14]

#### CONCLUSION

The conclusion of the results of this research is that there is no effect before and after first aid training for students with situational syncope at the elementary level, class V students at SDN 7 Rejang Lebong, Central Curup District.

Researchers suggest that red Cross teen officers be reactivated and formed, especially in other classes at SDN 7 Rejang Lebong, and increase the stock of medicines for boxes in the school health room, and hold regular training activities specifically about first aid in accidents, especially for students with situational syncope.

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