

Cooperative Learning Approach in Increasing Knowledge of First Aid for Bleeding

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ABSTRACT

Bleeding that occurs due to trauma needs to be treated early to stop it as soon as possible. Trauma events often occur in the community so that it is hoped that there will be a positive contribution from students who are part of the community to provide first aid to victims who experience bleeding quickly and accurately. The purpose of this study was to determine the increase in knowledge of KSR team students on first aid for bleeding. This study uses a pre-experimental one group pre-posttest design. This research was conducted at SMA Negeri 1 Kediri. The population in this study were members of the KSR who had never received the material and practice of first aid for bleeding before. Filling out the questionnaire was carried out before and after the intervention, respondents were given health education, discussions, and brief training on first aid in cases of bleeding in groups. In the research results, it was found that the knowledge before the action was mostly moderate (57%), while the knowledge after the action was mostly high (72%). This study used the Wilcoxon statistical test with $\alpha = 0.05$. The above research shows that there is an effect of the cooperative learning approach on KSR's knowledge of bleeding first aid.

INTRODUCTION

Bleeding is the discharge of blood from the blood vessels due to damage to the vessel walls. Bleeding is accompanied by damage to the skin so that the blood leaves the body caused by trauma or disease. Bleeding can occur inside or outside the human body. Internal bleeding is more dangerous and harder to detect than external bleeding. So that if it is not immediately recognized and treated, it can be fatal, shock can occur and eventually death (Fathoni et al., 2019; Sarana et al., 2019).

Bleeding due to trauma can be caused by traffic accidents. The number of traffic accidents in Indonesia is still high, plus public ignorance about the correct procedure for helping accident victims causes victims to be handled late, mishandling can worsen the victim's condition. National level accident case data from BPJS Employment in 2014-2017 shows fluctuations. Accidents in 2014 occurred 102,182 times with 2,375 deaths. In 2015 the number of accidents increased to 110,275, but the death toll fell to 530 people. In 2016 there were 101,367 accidents with an increase in deaths to 2,382 people. In 2017

accidents increased to 123,041 with deaths to 3,175 people (Sarana et al., 2019; Kementrian Kesehatan RI. Direktorat Jendral, 2019).

If bleeding occurs in cases of trauma, it is important for rescuers to stop it as soon as possible. To realize the Road Safety Action Program, it is necessary to synergize various parties in road traffic safety. First aid in accidents is useful for the general public, employees, workers, and all individuals. First aid aims to save the patient's life, relieve suffering and prevent the victim from getting worse and maintain the patient's soul until further help is given (Fathoni et al., 2019).

Students are part of the community who are expected to make a positive contribution to providing first aid to victims who are bleeding quickly and accurately. In order to improve the quality of human resources, especially knowledge and skills in providing first aid to patients in an emergency. First aid training on bleeding for students and the general public needs to be carried out for more optimal handling in the pre-hospital setting. The training is expected to increase knowledge and raise public awareness to help bleeding victims in the right way before medical assistance arrives (Kementrian Kesehatan RI. Direktorat Jendral, 2019).

The use of appropriate training methods is expected to arouse the enthusiasm of students to be actively involved in learning activities. Cooperative learning learning model is one of the appropriate learning models in learning. In the cooperative learning learning model, fellow students can interact directly with fellow students through discussion and practice actions so that it is expected to motivate students to think critically as well as dialogically, creatively and interactively, namely problem solving. This learning model emphasizes the activeness of students and builds activities together. Students carry out learning activities with structured small groups to help each other in order to improve cognitive, affective, and psychomotor abilities in understanding subject matter and

solving problems collectively in accordance with predetermined learning indicators. Students can help their study friends who are capable below the minimum standard so that a social spirit grows within themselves (Sulaiman, 2014; Tambak, 2017; Sinaga, 2019; Ali, 2021).

The purpose of this study was to determine the increase in knowledge of the KSR team students on bleeding management. This research is important because the KSR team is part of the community that has access to places that are at risk of trauma. Meanwhile, bleeding events often occur outside the hospital, so first aid is the key to saving lives. Delivering information with the right approach, has an impact on understanding and mastery so that it can be applied quickly and precisely.

METHOD

This study uses a pre-experimental one group pre-post test design. This research was conducted at SMA Negeri 1 Kediri on October 31, 2021. The population in this study were members of the KSR SMA Negeri 1 Kediri who had never received the material and practice of first aid for bleeding before. Respondents in this study were 28 members of KSR SMA Negeri 1 Kediri. Collecting data using a questionnaire that has been tested for validity and reliability. Filling out the questionnaire was carried out before and after the intervention, respondents were given health education, discussions, and brief training on first aid in cases of bleeding of small group. This study used the Wilcoxon statistical test with $\alpha = 0.05$. The variable in this study was knowledge of first aid on bleeding.

RESULTS

Table 1 knowledge of first aid on bleeding before cooperative learning

Before Intervention	Minimum Score	Maximum Score	Median	Standard Deviasi
	4	9	5,44	1,045

Table 2 knowledge of first aid on bleeding after cooperative learning

Post Intervention	Minimum Score	Maximum Score	Mean	Standard Deviation
	9	12	10,56	1,1056
Wilcoxon Signed Rank test			p = 0.007	

DISCUSSION

In the research results, it was found that the knowledge before the action was mostly moderate (57%), while the knowledge after the action was mostly high (72%). Cooperative learning strategies are student-oriented which focuses on conscious and deliberate learning with the cooperation of participants in groups. A learning model that provides independence, grows and stimulates the mind to think and apply knowledge to cases. In this method, there is a communicative interaction between the trainer and the participants in the learning process in order to improve cognitive, affective, and psychomotor abilities. The group must not let one of its members not understand or understand the problem being practiced (Abelsson & Nygårdh, 2019).

Cooperative learning activities or activities are centered on cooperation between students. Students who do not understand about first aid for bleeding will get an explanation from their fellow groupmates. So that a common understanding is achieved from group members. This has a positive impact on the learning outcomes of group members. A comfortable classroom atmosphere, good and friendly trainers can increase enthusiasm and encouragement to learn better in developing skills in working together in a group (Fathoni et al., 2019).

To manage a comfortable and friendly classroom environment requires the creativity of the trainer, so that the implementation of Cooperative Learning can be carried out properly. Differences in point of view in first aid bleeding between participants are common, therefore the trainer as a mediator must be able to provide

problem solving. During the teaching and learning process, the trainer must really focus on the case being practiced. The trainer gives suggestions as needed and if the practice is not correct and provides good and appropriate input. The trainer appreciates the group. To find out the extent of the success of students in the Cooperative Learning model, the trainer must evaluate according to needs (Sinaga, 2019; Sulaiman, 2014; Tambak, 2017; Ali, 2021).

Health education first aid on bleeding using cooperative learning method includes the provision of health education through small groups. Submission of material using techniques and media that can be accepted by the group is accompanied by practice. Submission of material is carried out by several trainers who are responsible for assisting each group (Fathoni et al., 2019).

From the results of the study, it showed that the knowledge of most of the respondents was sufficient after participating in cooperative learning about first aid for bleeding. This shows that the respondents responded well to the material. The application of cooperative learning consists of health education in groups, and the practice of first aid on bleeding using several fictitious cases. The health education provided includes an explanation of recognizing the signs and symptoms of victims who are bleeding. The ability of the helper to ask for help, when to ask for help, to whom, and what to say needs to be known by the first helper. In the practice section, participants were introduced to first aid in some cases of bleeding. After receiving Health Education and practice, respondents practice using cases that describe bleeding conditions (Paula, 2009).

Cooperative learning is a process of delivering health education not only through a good teaching technique approach, but also communicating from heart to heart to each participant by giving more attention by involving all group members in the process. This is supported by interesting techniques and practices using referrals from the

ministry of health that can be used by the general public, thereby increasing participants' interest in following the material. The use of appropriate strategies can increase the knowledge of group members. This is evidenced by the participants being able to answer questions after conducting health education activities and practices. They are able to correctly state what to do when meeting a victim with bleeding and the initial management of a victim with bleeding. An indicator of increasing student knowledge is that there is an increase in the number of correct answers to the questionnaire distributed before and after health education (Sarana et al., 2019).

Through cooperative learning, students can recognize bleeding, first aid for bleeding and practice what is learned in real life. In cooperative learning, training participants who are grouped into small groups are invited to be involved in the learning process on cognitive, affective and psychomotor functions in first aid for bleeding so that respondents can be in a conducive situation so that the material is easier to accept and easy to apply in the community when near them. There are patients with bleeding. The introduction and understanding of the appropriate first aid process for bleeding for participants is expected to be a good first step in the process of saving lives for victims with bleeding (Kementrian KesehatanRI. Direktorat Jendral, 2019).

A planned and structured learning process regarding first aid for bleeding, can increase knowledge. Giving the right material, a comfortable class atmosphere, cooperative group members will be able to increase knowledge, so that participants are ready to provide first aid for bleeding if needed. In the implementation of first aid for bleeding, the ability is more based on critical thinking so that direct learning and repetition are needed. Direct skill evaluation is useful to determine participants' understanding and skills. First aid for bleeding aims to prevent excessive blood loss at the scene until

medical help arrives at the scene. Emotional support in the event of bleeding is very necessary considering the anxiety that rescuers may experience, whether or not giving first aid to bleeding (Paula, 2009).

CONCLUSIONS AND RECOMMENDATION

The above research shows that there is an effect of the cooperative learning approach on KSR's knowledge of bleeding first aid with a p value 0,007. When KSR learns directly about first aid training on bleeding, which means learning procedurally, structured and rationally through step by step through lectures, demonstrations, or practices, whether it's about getting to know bleeding, first aid for bleeding and applying new experiences gained in real life. It is hoped that participants can perform first aid for bleeding until the home team arrives to provide advanced life support which is then transferred to the ER

Traumatic events that can cause bleeding may occur near lay people, students, or members of the KSR, so it is certain for future researchers to examine the effectiveness of learning focused on travel and transportation for victims.

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