

Original Article

# The MAMOVI Method for Training the Heimlich Maneuver in Adolescents

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**ABSTRACT**

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**Keywords:**


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**Background:** Choking is a condition of total or partial obstruction of the airway that requires immediate action to avoid death or disability. The lack of information means that PMR members have not been able to implement choke management appropriately. This study aimed to see how Heimlich maneuver training using the MAMOVI method (lectures, demonstrations, and videos) affected PMR members at SMPN 1 Ngantang's ability to provide choking first aid.


**Methods:** Pre-Pre-experimental design research design with a one-group pretest-posttest approach without control. The sampling technique with Purposive Sampling obtained 21 respondents from 70 populations. The research instrument used a choking first aid ability observation sheet, with a Wilcoxon Signed Rank Test statistical test with a significance level of 0.05

**Results:** The result of the study before being given the Heimlich Maneuver training intervention showed that (100%) respondents had less ability. After receiving complete (100%) intervention, respondents demonstrated excellent skills. The mean pre-test score was 3.71, and the mean post-test score was 26.71. It showed an increase in the value before and after the intervention was given. The analysis yielded a sig (2-tailed) p-value of 0.000 ≤.05, so the p-value comparable000 indicating that Heimlich Maneuver training with the MAMOVI method (lectures, demonstrations, and videos) has an effect on PMR members at SMPN 1 Ngantang's ability to perform choking first aid.


**Conclusion:** The MAMOVI method combined the three methods to make it more interactive, interesting, effective, and understandable for respondents. We recommend that all school residents socialise this ability to prevent choking events.

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
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## Introduction

An emergency is a clinical condition of a patient that requires immediate medical action to save lives and prevent further disability (Argo, 2019). Emergency conditions can be divided into two categories: pre-hospital and intra-hospital. Within the pre-hospital range, it can occur

anywhere, so the participation of the community and special lay people, such as the Youth Red Cross and health workers, are expected to be able to carry out first aid measures in emergency conditions such as choking (Candra, 2021). First aid (First Aid) provides immediate assistance to victims of



illness, injury, or accident requiring basic medical treatment ([PMI](#), 2011).

Health problems that occur in pre-hospital school children, where adolescents are part of school children, include common health problems such as poisoning and diarrhoea, and one of them is choking. According to the (WHO, 2018), adolescents are residents in the age range of 10–19 years. In their daily activities, adolescents are prone to choking due to food purchased at school. Stopping is a condition of total or partial obstruction of the airways that requires immediate action. Narrowing of the airway can be fatal if it leads to impaired respiratory organs, which causes a decrease in oxygen in the body, so choking can cause death ([Jose.](#), 2020). Choking on a foreign body risks, in the short term, the occurrence of airway obstruction, which results in death, while in the long time, it can cause atelectasis, bronchiectasis, recurrent pneumonia, the formation of granulation tissue, and life-threatening asphyxia. Sometimes, a foreign body can get stuck in the glottis, resulting in acute respiratory distress, hoarseness, and stridor. Choking on foreign objects has a mortality rate of up to 45%, while 30% of patients who survive may develop hypoxic encephalopathy ([Sugandha](#), 2018).

Choking is the fourth leading cause of accidental death (National Safety Council, 2017). The World Health Organization (WHO) explained that in 2013, there were 17,537 cases of choking in adolescents, 59.5% of which were due to food, 31.4% to foreign objects, and 9.1% to other unknown causes, while the prevalence of choking on foreign entities that occurs in children around the world is as high as 80%. From the data obtained, there were 112 cases of choking in Indonesia in 2013 (Medical Records of Dr. Harjono Hospital, Ponorogo, East Java). According to the 2014 Department of Health Service, choking can

be caused by 105 cases of grains, 82 cases of nuts, 79 cases of vegetables, and other causes, namely food and fish bones ([Nurkhamidah](#), 2019). In the preliminary study that the researchers conducted at SMPN 1 Ngantang on November 5, 2022, the researchers conducted interviews by asking ten students about choking incidents at SMPN 1 Ngantang after conducting interviews about choking first aid efforts carried out in a way that eight students answering that they were given a drink, one student patting his back, and one student patting the nape of the neck.

Choking events are often found in school children. Choking occurs when swallowing food so that it enters the respiratory tract. Generally, food eaten will enter the oropharynx, the larynx will move the epiglottis, which makes the pharyngeal muscles press into the oesophagus, and then the oesophagus and larynx will return to their normal positions. In this incident, the epiglottis fails to close, causing food to enter the trachea. As a result, the body responds reflexively to expel food from the trachea, and choking occurs ([Nurkhamidah](#), 2019). Usually, schoolchildren buy food and eat it carelessly, such as eating too fast or eating while talking or laughing, causing choking. This incident is an emergency because if it is not treated immediately, it can cause death due to airway obstruction.

Measures to deal with choking need to be taken immediately when finding a victim with a choking condition. The success of life support for victims experiencing an emergency condition depends on the speed and accuracy of its handling. The sooner the victim is found, the sooner the patient will get help to avoid morbidity and mortality ([Deviana](#), 2022). If the victim is late getting first aid, there will be a lack of oxygen, and brain damage may occur if the brain does not get oxygen for 4–6 minutes ([Huda. Moch. M.](#), 2015). In cases of choking, it can

lead to fatal or life-threatening situations. To prevent this, everyone must know how to give first aid for choking, which can be done independently, quickly, and precisely. First aid for choking can be done with the Heimlich maneuver. The Heimlich maneuver, or abdominal thrust, is a first aid procedure used to help people who are choking by releasing upper airway obstruction caused by a foreign object that enters the respiratory tract. The Heimlich maneuver is considered a fast and inexpensive technique that does not require medical expertise ([Deviana, 2022](#)).

Anyone can handle choking cases; action on choking first aid is the next step that must be taken immediately. Nursing institutions play a role in preventing all ill conditions that continue to develop in society, one of which is equipping junior high school students with competence, especially the Youth Red Cross, in carrying out the handling of choking victims. Health institutions need to provide education and training related to handling choking victims, especially those that occur at school, either during lessons or breaks. School is a safe and healthy place with an environment that protects students and staff from threats and danger ([Argo, 2019](#)). Most of the general public, especially PMR members, do not know what to do when friends at school or people around them choke. Efforts can be made by providing Heimlich Maneuver training, education, and information to increase knowledge and skills so they can handle friends or people around them who choke. With extensive expertise and qualified skills, it will certainly increase PMR members' ability to handle choking cases in schools and their surroundings.

Along with the development of modern times, Heimlich Maneuver training uses the Mamovi method (lectures, demonstrations, videos), which includes presentations and is combined with

demonstrations and video shows to make it more interesting and easy to understand. The first method is the lecture, which will be the first step for students or PMR members in increasing their knowledge of handling choking in theory. The second method is a demonstration after PMR members know the basics and how to handle choking in view. It is carried out directly or in direct protests with a victim simulation or phantom. This demonstration method is done by demonstrating to a phantom or a friend. The third method is video; besides being carried out in a demonstration, PMR members can watch choking first aid videos to make it more interesting. This video method involves showing videos on choking management. The advantage of the Mamovi method is that it is one and three methods simultaneously. It will be combined when providing education, making participants understand more about theory and practice. The uniqueness of this study from previous research is that the respondents were divided into small groups and given two treatments with 60 minutes for each treatment. Meanwhile, in ([Rahayu, 2021](#)), providing education about emergency management to children to increase knowledge and skills was done with the same method as this study but with a larger number of respondents within 100 minutes and with only one day of assessment using a questionnaire sheet. In addition, the research conducted ([Ningsih, 2020](#)) entitled Improving Mothers' Skills in Choking Treatment was carried out using the same method, with many respondents in one meeting carried out in one day 90 minutes.

## Methods

The research design was pre-experimental with one group pre-posttest approach. The sample in this study were adolescents who were members of the Red Cross at Junior High School 1 Ngantang,

with a total of 21 respondents who were selected by purposive sampling technique. The research is located at Junior High School 1 Ngantang, Malang. Inclusion Criteria: Active students, students willing to be a respondent, and students who have been Red Cross members for one year. Respondents were divided into three small groups of 7 students for each group. The intervention was conducted twice for two

weeks, 60 minutes for each treatment. Data collection techniques were carried out by observing the ability to perform the Heimlich maneuver. Statistical analysis using the Wilcoxon Signed Rank test ( $\alpha = 0.05$ ). This research has been declared ethically clearance by the Karya Husada Kediri Institute of Health Science ethics committee.

## Results

Table 1. Distribution Frequencies of Responses

Variables		f	(%)
Gender	Male	2	9,5
	Female	19	90,5
Age	14 years old	17	81
	15 years old	4	19
Class	Class VIII	15	71,4
	Class IX	6	28,6
How long have you been a Red Cross member	1 to 2 years	15	71,4
	More than two years	6	28,6
Motivation	Themselves	17	81
	Friends	4	19
Information on Choking first aid	Never	21	100
Resource for Choking first aid	Never before	21	100
<b>Total</b>		<b>21</b>	<b>100</b>

Table 1 shows that almost all Red Cross members (90.5%), namely 19 respondents, were female. Nearly all members of the Red Cross (81%), namely 17 respondents aged 14 years, Most of the class level occupied by Red Cross members (71.4%), namely 15 respondents, occupy class VIII. The characteristics of the length of participation of most members (71.4%) were that they took part in the Red Cross for around 1-2 years, namely 15 respondents. Meanwhile, the motivation to participate in the Red Cross was almost entirely self-driven (81%), namely for 17 respondents. Regarding the characteristics of choking first aid information, all (100%), or 21 respondents, had never received such information. The sources of information obtained about first aid for choking were all (100%), namely, 21 respondents who had never received sources of information from anywhere.

Table 2 The ability of Red Cross members in the Pre-post-Test

Ability	<i>f</i>	%
Good	-	-
Moderate	-	-
Less	21	100
Total	21	100

Table 2 shows that the ability of Red Cross members at Ngantang 1 Junior High School to perform choking first aid before being given the Heimlich Maneuver training intervention using the MAMОВI method (lectures, demonstrations, videos) regarding choking first aid was 100%, namely, 21 respondents could not perform choking first aid or were in the underprivileged category.

Table 3 shows the ability of Red Cross members in Post Test

Ability	<i>f</i>	%
Good	21	100
Moderate	-	-
Less	-	-
Total	21	100

Table 3 shows the ability of Red Cross members at Ngantang 1 Junior High School to perform choking first aid after being given the Heimlich Maneuver training intervention with the MAMОВI method (lectures, demonstrations, videos) on choking first aid for all (100%), namely 21 respondents, is in the good category.

Table 4 shows the ability of Red Cross members.

Ability	Intervention			
	Pretest		Posttest	
	<i>f</i>	(%)	<i>f</i>	(%)
Good	-	-	21	100
Moderate	-	-	-	-
Less	21	100	-	-
<b>Total</b>	21	100	21	100

**Wilcoxon Signed Rank Test**  $p\text{-value} = 0,000 \leq 0,05$

Table 2 shows that all (100%) respondents, namely 21, had first aid skills in the less category before the intervention. Meanwhile, after being given the full intervention (100%), 21 respondents had good first-aid skills. Based on the results of the Wilcoxon Signed Rank Test, it was found that the sig (2-tailed) p-value was 0.000 a 0.05. So, if the p-value is 0.000, then  $H_0$  is rejected. It can be concluded that Heimlich maneuver training using the MAMОВI Method (lectures, demonstrations, videos) affects the choking first aid ability of Red Cross members at Junior High School Ngantang.

## Discussion

Based on the study results, it was obtained before the Heimlich Maneuver training intervention was carried out using the MAMОВI method (lectures, demonstrations, videos) for Red Cross members at Ngantang Junior High School who all (100%) had less ability. This is normal because the respondent has not received any information. Therefore, information in any form must add to one's insight and abilities.

Ability is the ability of an individual to master skills and be used to carry out various tasks in a job ([Handayani, 2019](#)). Ability is a combination of three educational domains that include friendly knowledge, skills, and attitudes shaped by patterns of thinking and acting in everyday life ([Sriyanto, 2015](#)). According to ([Bloom, 2018](#)), abilities are divided into three categories: cognitive, affective, and psychomotor. The three factors in this ability have a very close relationship and cannot be separated. Before arriving at the psychomotor aspect, you will first experience cognitive and affective stages.

Cognitive aspects are aspects related to reasoning or thinking processes, namely the ability and activity of the brain to develop rational skills. Starting with remembering, the fundamental aspect, which is part of the cognitive aspect, refers to the ability to recall information or knowledge stored in memory. Understanding is the ability to understand instructions and confirm understanding of concepts taught orally and in writing. We are aiming to apply the material that has been submitted. We are analyzing and separating the concept into several components and connecting them to gain an understanding of the concept. Evaluate the ability to think and provide judgment and consideration. This aspect is the ability to

provide an assessment of a learning material.

The second step after the cognitive aspect will be the affective element. The affective element is an ability based on emotions, such as appreciation, values, feelings, and attitudes. Receiving refers to the ability to notice and respond to appropriate stimulation. Among them is responding to the attitude of obeying and playing an active role. Appreciate, accept, value, and participate.

The third step, or the last aspect after going through cognitive and affective, is psychomotor. The journey of ability will stop at the psychomotor aspect, namely the ability to imitate or practice something. Among them, imitating means that participants can imitate or follow a behavior they see. Manipulation means participants can do something without visual aid at the imitating level. Precision. Meaning that participants are expected to be able to try, practice, and do other things. Articulation implies that participants are expected to be able to demonstrate a series of movements with accuracy, the correct order, and the right speed. Naturalization means that participants are expected to make movements.

The factors that affect ability in the results of this study include gender, age, grade level, length of participation in PMR, motivation, information, and sources of first aid information for choking. The first factor affecting ability is gender. The gender distribution was almost entirely female (90.5%), while two respondents (9.5%) were male.

According to ([Rusgrok., 2014](#)), gender affects a person's ability and intelligence; intelligence in men and women is often associated with differences in brain physiology. Accompanied by intelligence, one's abilities will be affected. Meanwhile,

([MetaAnalysis](#), 2014) on gender differences found that men outperform women regarding ability and intelligence. According to ([Soekidjo](#), 2017), men's capabilities exceed women's capabilities because women only use memorization methods to achieve success. Meanwhile, men use more applicable methods in which they act immediately. Besides gender, another factor that influences ability is age. The age distribution in this study was 81% of respondents aged 14 years old and 19% of respondents aged 15 years old.

According to ([KEMENKES](#), 2014), age is a factor related to growth and defines physical and psychological development. Adolescence is a transition period from childhood to adulthood marked by physical, psychological, and intellectual changes. At this time, teenagers tend to focus on themselves and always want to enjoy time for themselves. Which situation is influential in the process of socializing with people around. As a result, less information is obtained. However, as we age, the process of receiving information and experiences that stimulate cognitive thinking improves ([Ayu](#), 2019). Based on the explanation above, we can analyze that the results of the study (100%) respondents covering the ages of 14 and 15 years both had a low level of ability before the Heimlich Maneuver training intervention was carried out with the MAMOVI method (lectures, demonstrations, videos). The video shows, and demonstrations in this study were able to provide a stimulus to the respondents so that they could help choke victims. Another thing that affects ability is the class level of the respondent.

According to ([Soekidjo](#), 2017), education is an effort to provide knowledge so that it can change behavior in a positive direction. Education also provides knowledge so that changes in behavior and ability levels can occur. A high level of

education will make it easier for someone to get information. Based on the explanation above, it can be concluded that it is associated with the class being occupied by the respondent, in which, in this study, the majority of respondents (71.4%) occupied class VIII, while 28.6% occupied class IX, which results in the fact that before the Heimlich Maneuver training intervention using the MAMOVI method (lectures, demonstrations, videos), the ability of PMR members in choking first aid was in the poor category. This is because respondents have never received any information about first aid for choking, either from friends, family, or teachers. In addition, the factor that influences subsequent ability is the length of participation of PMR members.

The distribution of length of participation of PMR members (71.4%) took part in PMR for 1-2 years, while (28.6%) respondents took part in PMR for more than two years. According to ([Aqli](#), 2014), PMR, or the Youth Red Cross, is an organization fostered by the Indonesian Red Cross that is centered on schools or community groups and aims to build and develop the character of the Red Cross so that they are ready to become PMI volunteers in the future. PMR membership and levels are divided based on educational status and age. Based on the explanation above, it can be concluded that in this study, all PMR members or respondents held the rank of Middle PMR. The higher the level, the better the ability of the member. This is the same as saying that the longer the participation as a PMR member, the better the ability and absorption of the material presented. This means that the ability and knowledge of the six respondents are better than those of the other 15 respondents. However, the study results showed that the ability and knowledge of first aid for choking among PMR members of SMPN 1 Ngantang were still in the poor category.

This is because the PMR coaches and coaches at SMPN 1 Ngantang have never delivered material or training regarding choking in general or first aid, which affects the lack of ability of respondents in choking first aid. The factor that influences the next ability is the motivation for participating in PMR.

According to (Amroini, 2019), motivation to participate in extracurriculars is an encouragement that arises from internal and external stimuli so that a person wishes to make changes in behavior for the better by participating in extracurricular activities. Extracurricular activities are intended so students can develop their personalities, talents, and abilities in various non-academic fields. The study's results were obtained (81%) from respondents motivated to participate in PMR of their own free will. Meanwhile, 19% of 4 respondents were motivated to participate in PMR at friends' invitations. Based on the explanation above, it can be concluded that motivation influences enthusiasm and curiosity in delivering material. Motivation from within will foster confidence in receiving material and its pleasure; there is no compulsion from the heart. This is inversely proportional to the motivation that arises from inviting friends; on several occasions, the enthusiasm for participating in PMR will decrease, and there will be a feeling of being forced, which affects the Heimlich Maneuver training process for PMR members of SMPN 1 Ngantang's choking first aid abilities. In addition to motivation, factors that affect ability include information about first aid for choking.

All (100%) have never received information on first aid for choking. According to research (Waruwu, 2018), a lack of communication causes a person not to understand first aid for a choking child. According to Panji (received information

on first aid for choking. According to research (Waruwu, 2018), a lack of information causes a person not to understand first aid for a choking child. According to (Panji, 2019), the more information one gets, the more knowledge one will gain. Lack of knowledge will affect how you behave when helping a choking victim. Based on the explanation above, it can be concluded that this study is directly proportional to the research above because information can affect a person's ability to help a choking victim. The research results showed that the ability of PMR members to help choking victims was in the poor category because they never received information from anywhere. This relates to the last capability factor, namely, the source of information.

Distribution of information sources on first aid for choking: all respondents (100%) have never seen information from anywhere. Someone who has never received information either from social media, print media, or health education directly causes a lack of understanding about helping choking victims. Data can be obtained in various ways and media; technological advances make it easier for someone to get information. In this study, the respondent's ability to provide first aid for choking with the Heimlich maneuver showed results in the less category due to not finding a source of information about first aid for choking victims.

Based on the results of the study, it was found that first aid for choking victims among PMR members at SMPN 1 Ngantang showed that overall (100%) respondents could provide first aid for choking victims in the good category. In this study, the training method used was MAMОВI. The MAMОВI method (lectures, demonstrations, and videos) is used in health education to assist the teaching and learning process by explaining material in general, followed by



showing direct videos and demonstrations by respondents. So that respondents easily understand the material presented and find it interesting and not boring. Not only that, the respondent can also demonstrate first aid for choking directly under the researcher's supervision.

Based on the study results, the respondents, after being given the Heimlich Maneuver training intervention with the method above their ability to perform choking first aid overall (100%), were in a good category; this was because the intervention was given twice a week, which will make respondents remember the material presented earlier. This aligns with research ([Basniati, 2020](#)), which states that increased skills and knowledge also occur in respondents who are given health education using lecture and video methods. Changes in respondents' knowledge after being given an intervention or health education aim to motivate the target to behave with the right health demands and values. The characteristics of someone motivated to participate in health education can be seen from a positive attitude: showing interest, having attention and behavior, and wanting to participate in learning activities. Educators' efforts can also affect the success of targets in receiving information. Interesting abilities, behaviors, and materials from an educator can provide a stimulus to the target so that the target is interested and able to pay attention and remember the material ([Sinaga, 2019](#)).

Research ([Ningsih, 2020](#)) said that health education using the demonstration method can increase knowledge and abilities; this is one way of providing information in a non-formal manner. The provision of non-formal information includes health education and demonstrations as well as other sources of information such as newspapers, online media, and others. According to

([Notoatmodjo, 2014](#)), health education using the demonstration method can increase knowledge and abilities; this is one way of providing information in a non-formal manner. The provision of non-formal information includes health education and demonstrations as well as other sources of information such as newspapers, online media, and others. According to ([Notoatmodjo, 2014](#)), the role-play demonstration discussion method is suitable for learning attitudes, actions, skills, and behaviors.

Based on the facts and theory above, it can be concluded that the MAMОВI method (lectures, demonstrations, and videos) is a method that can be used to improve one's abilities and knowledge. The lecture method can be used because it directly explains the material presented, and respondents will easily understand a clear and not confusing delivery. Furthermore, the demonstration method can be used because it directly demonstrates the steps of first aid for choking according to the SOP delivered in the lecture method. In addition, showing a video about choking first aid adds interest to the health education or training process. Because in the video, you can see firsthand how to give first aid to a choking victim. In this study, the results were obtained after being given the overall Heimlich Maneuver training intervention (100%) respondents had abilities in the good category.

Several factors, including concentration and the room situation, influence this. High concentration will increase understanding when receiving material, and a quiet room will enable respondents to concentrate. PMR members and researchers occupied a quiet and well-lit room during the study. This is what makes respondents and researchers able to focus well. Class level and length of participation of PMR members also

influence the research process and results. Although the results obtained by respondents with class VIII were as good as those with class IX, the duration of participation of respondents with 1-2 years and those with more than two years differed slightly in the process, namely speed and responsiveness in receiving information. Furthermore, in terms of motivation to participate in PMR, respondents who took part in their own free will had greater curiosity and enthusiasm because there was no coercion, which was inversely proportional to the motivation for inviting friends. After all, coercion made the respondents less enthusiastic, even though the results were overall good. This means that respondents can follow and examine the material well.

The next factor is information and sources of information. After being given Heimlich Maneuver training using the MAMОВI method (lectures, demonstrations, and videos), the information received by respondents increased. Additional information will encourage individual interest in gaining understanding and knowledge. Education in the form of education affects increasing information. Providing Heimlich Maneuver training using the MAMОВI method (lectures, demonstrations, videos) on choking first aid skills for PMR members provides new knowledge and skills that are easy to understand and apply if you find a choking victim.

Based on statistical tests using the Wilcoxon Signed Rank Test, the sig (2-tailed) p-value is 0.000 0.05. So the p-value  $\alpha$ , which means that there is an effect of the Heimlich Maneuver training intervention using the MAMОВI method (lectures, demonstrations, videos) on the choking first aid ability of PMR members at SMPN 1 Ngantang.

In this study, the Heimlich Maneuver training intervention using the MAMОВI method (lectures, demonstrations, videos) on choking first aid was given twice in two weeks. Starting with the 1st meeting of the first week of the pre-test, respondents were given three questions about the concept of choking and asked to do first aid for choking, followed by intervention 1, namely Heimlich Maneuver Training with the MAMОВI method (lectures, demonstrations, videos), as well as demonstrations carried out by all respondents. At the second meeting of the second week, the same intervention was given with the same method as the first meeting, and then a post-test was carried out. The respondents were given three questions about the concept of choking and asked to perform choking first aid according to what had been taught previously. The enthusiasm of all respondents for performing choking first aid was very high, so all (100%) of respondents had choking first aid skills in the good category. In this study, all (100%) respondents could change.

Based on the research results obtained from the observation sheet, some questions and commands include cognitive, affective, and psychomotor aspects. It was found that the results of the cognitive aspect had a high score during the post-test; this became the basis for the idea that the development of the psychomotor aspect starts from the cognitive aspect, continues to the affective aspect, and ends with the psychomotor aspect. This means that psychomotor aspects will not be obtained if they are not based on cognitive aspects because psychomotor abilities are based on knowledge and attitudes. Extensive knowledge and a good attitude will increase the ability.

According to (Notoatmodjo, 2014), sources of information are everything that

acts as an intermediary in conveying information and influencing a person's abilities and knowledge. There is an increase in the score after being given the Heimlich Maneuver training intervention related to patterns and behavior if you find a choking victim, especially at school. This is useful for avoiding death due to choking incidents. A person's skills will improve if they continue to be trained to increase their abilities to become experts or masters of one of the existing fields. They were sharpening one's skills with training.

In this study, Heimlich maneuver training using the MAMOVI method (lectures, demonstrations, and videos) can improve the overall ability of respondents influenced by three things: interesting methods, the characteristics of respondents, and the existence of suitability in the school environment. The first is an interesting MAMOVI method (lectures, demonstrations, videos). This method combines the three methods to make it more interesting, interactive, effective, and understandable for respondents. The lecture method uses PowerPoint, which employs more pictures to attract respondents' interest in learning, and an illustration for respondents. Besides that, this method is explained orally, clarifying the message the researcher wants to convey, followed by showing videos. It makes the time to provide information more efficient because it is short and clear, emphasized by demonstrations that respondents can directly demonstrate.

The second is the characteristics of the respondents; basically, this research was carried out at favorite schools, and many parents wanted to send their children to study at SMPN 1 Ngantang, meaning that the selection to enter this school was very difficult. There were special criteria, such as achieving a National Examination score that had to be above average. Flat. Which

students in it are selected students? This relates to the students in it, including PMR members, in their responsiveness to receiving information. According to the facts obtained when conducting research when the intervention was given, the respondents were enthusiastic about receiving information, actively asking questions, and responsive. Motivation also plays an important role. In this study, almost all respondents (81%) were self-motivated to participate in PMR. This made the respondents enthusiastic about carrying out this research. Third, there is conformity in the school environment, namely problems that may arise in the school environment, such as choking cases, which are often considered normal by some circles but can cause death.

Therefore, PMR members feel that they are the front guard in a school who must be alert, quick, and precise in administering first aid and have an awareness of the knowledge that must be continuously developed to make respondents listen carefully to the material presented by researchers. This attracts interest and changes behavior, raising awareness that one has to help a choking victim. With Heimlich Maneuver training using the MAMOVI method (lectures, demonstrations, and videos), it was found that the results of this study could improve the ability of PMR members at SMPN 1 Ngantang to perform choking first aid.

## Conclusion

All respondents had abilities in the "less" category before the Heimlich Maneuver training intervention with the MAMOVI method (lectures, demonstrations, videos) on choking first aid abilities. All respondents had powers in the "good" category after the Heimlich Maneuver training intervention using the MAMOVI method (lectures,

demonstrations, videos) on choking first aid skills. Heimlich maneuver training using the MAMOVI method (lectures, demonstrations, and videos) can improve choking first aid skills.

### Authors Contributions

Pria W.R. Girianto, Didit Damayanti, and Anisa Ajeng Pebrianti contributed to the design and implementation of the research, the analysis of the results, and the writing of the manuscript.

### Conflicts of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript. All the authors sign this statement to indicate agreement that the above information is true and correct.

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### References

- Aditya, Y. (2016). Pengaruh Penerapan Metode Pembelajaran Resitasi Terhadap Hasil Belajar Matematika Siswa. *Jurnal SAP. Vol.1, No.2*
- Amroini. (2019). Hubungan Antara Dukungan Sosial Orang Tua Dengan Motivasi Mengikuti Ekstrakurikuler PMR. *Fakultas Psikologi. UIN Malang.*
- Aqli. (2014). Buku Pertolongan Pertama PMR Tingkat Wira. *Edisi 1.*
- Argo (2019). Pengaruh Pelatihan *Abdominal Thrust* Terhadap Pengetahuan dan Keterampilan Menolong Korban Tersedak Pada PMR Di SMPN 1 Kalisat. *Fakultas Ilmu Kesehatan. Universitas Muhammadiyah Jember.*
- Ayu. (2019). Efektifitas Pemberian Penyuluhan Kesehatan Dengan Metode Demonstrasi Terhadap Keterampilan Ibu Dalam Penanganan Tersedak Pada Anak Usia 2-5 Tahun Di TK Negeri Pembina Ngawi. *Skripsi. Diterbitkan Prodi Keperawatan. STIKES Bhakti Husada Mulia Madiun.*
- Basniati. (2020). Pengaruh Video Learning Multimedia Terhadap Pengetahuan, Sikap dan Perilaku pada Multimedia Learning. *Jurnal Ilmiah Kebidanan, 7 (2), 108-119.*
- Bloom. (2018). Revisi Taksonomi Bloom Kemampuan dengan 3 Aspek Terbaru. *Humanika. Kajian Ilmiah. Indonesia*
- Candra. (2021). Pelatihan Pertolongan Pertama Pada Kecelakaan Untuk Meningkatkan Keterampilan Masyarakat. *Jurnal Peduli Masyarakat. Fakultas Ilmu Kesehatan. Universitas Sains Al-Quran Wonosobo, Hal. 490.*
- Deviana, V (2022). Efektivitas Video Animasi Demo *Heimlich Maneuver (Choking)* Terhadap Kemampuan Ibu Menolong Anak Tersedak Studi DI Desa Bangunmulyo Kecamatan Pakel. *STIKES Karya Husada*
- Endang., *et al* (2020). Pengaruh Pendidikan Kesehatan Pertolongan Pertama Tersedak Dengan Google Form dan Phantom pada Orang Tua di TK Taman Sukaria Terhadap Kemampuan Keluarga. *Media Informasi Kesehatan. Vol.7, No.2.*

- Fazrina. (2016). Pemanfaatan Hasil Belajar Pada Pelatihan Keterampilan Mekanik Otomotif. Universitas Pendidikan Indonesia
- Gary. (2017). *Human Resource Management*. Edisi 7, Hal. 263.
- Gorionounova. (2018). Large and Fast Human Pyramidal Neurons Associate With Intelligence. *E-Life*. Hal. 1-38.
- Handayani. (2019). Profil Kemampuan Representasi Matematis Siswa SD Di Kec.Sumedang Selatan. *Vol.2 No.2*.
- Helma. (2021). Belajar dan Pembelajaran Dalam Metode Ceramah. *Keguruan dan Ilmu Pendidikan*. Universitas Lambung Mangkurat.
- Huda. Moch. M. et al. (2015). *Buku Saku Pertolongan Pertama Pada Kasus Tersedak*. : Kediri: STIKES Karya Husada.
- PMI. (2011). *Buku Pedoman Pertolongan Pertama*. PMI : Jakarta: Edisi kedua, cetakan ke empat.
- Jose., et al (2020). *Panduan Basic Life Support*. American Heart Association.
- KEMENKES. (2014). Profil Remaja (Perbedaan Usia Remaja). Jakarta: Kementerian Kesehatan RI.
- KEMENKES. (2016). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 19*
- KEMENKES. (2017). Profil Kesehatan Indonesia. Jakarta : Kementerian Kesehatan RI.
- Lapau. B. (2013). *Metode Penelitian Kesehatan Metode Ilmiah Penulisan Skripsi, Tesis dan Disertasi*. Jakarta: IKAPI.
- MetaAnalsis. (2014). A Meta-Analysis of Sex Differences
- Ningsih. (2020). Peningkatan Keterampilan Ibu Dalam Penanganan Tersedak Pada Bayi dan Anak. *Jurnal Keperawatan*. Poltekkes Kemenkes Mataram, Indonesia
- Notoatmodjo. (2014). Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta.
- Notoatmodjo. (2015). *Metodologi Pendidikan Kesehatan*. : Jakarta. : PT. Rineka Cipta.
- Nurkhamidah. R (2019). Penggunaan Audiovisual Dalam Peningkatan Kemampuan Manajemen Tersedak Pada Guru Di Ikatan Guru Raudhatul Athfal Kecamatan Papar Kediri. STIKES Karya Husada Kediri
- Nur., et al. (2015). Pendidikan Gizi Tentang Pengetahuan Pemilihan Jajanan Sehat Antara Metode Ceramah dan Komik. *Indonesian Journal of Human Nutrition*.
- Nurpratiwi. S (2020). Pengaruh Metode Emodid (Edukasi, Demonstrasi dan Video) *Self Directed Learning* Terhadap Kemampuan Psikomotor Ibu Dalam Melakukan Pertolongan Pertama Kasus Tersedak Pada Anak Usia *Toddler* Di Desa Kedungdowo Nganjuk. STIKES Karya Husada Kediri
- Nursalam. (2013). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. : Jakarta: Salemba Medika.
- Nursalam. (2017). *Metodologi Penelitian Ilmu Keperawatan (P.P Lestasi (ed))*. : Jakarta: Salemba Medika.
- Nurul. (2018). Pengaruh Pendidikan Kesehatan Dengan Media Video dan Metode Demonstrasi Terhadap Pengaruh SADARI. *Jurnal Care*. *Vo.6, No.2*.
- Nurul., et al (2020). Pengaruh Pemberian Edukasi Menggunakan Audiovisual Pada Ibu Terhadap Penanganan Tersedak Balita. *Jurnal Keperawatan Muhammadiyah Bengkulu*. *Vol.8. No.2*, Hal. 87-93.
- Nusalam. (2014). *Metodologi Penelitian Ilmu Keperawatan*. Pendekatan

- Praktis. Edisi 4.* : Jakarta: Salemba Medika.
- Panji. (2019). Pengaruh Edukasi Penanganan Tersedak Pada Balita Dengan Media Aplikasi Android Terhadap Pengetahuan Orang Tua Di Paud Tunas Mulia Kelurahan Sumbersari. *Digital Repository Universitas Jember*.
- Purwadarminta. (2014). Metode dan Tehnik Pembelajaran Partisipatif. Bandung: Falah Production
- Rahayu. (2021). Edukasi Kader dan Masyarakat Pesisir Kecamatan Soropia Sebagai Upaya Peningkatan Pengetahuan dan Kemampuan Dalam Penatalaksanaan Kegawatan Pada Anak. *Jurnal Inovasi, Pemberdayaan dan Pengabdian Masyarakat*. Poltekkes Kemenkes Kendari, Indonesia
- Rizky., *et al* (2019). Pelatihan Tentang Penatalaksanaan Choking Pada PMR Di SMPN 1 Genteng. *Warta Pengabdian. Universitas Jember*.
- Rusgrok., *et al* (2014). A Meta-Analysis of Sex Differences In Human Brain Structure. *Neuroscience and Biobehavioral*, Hal. 34.
- Sinaga. (2019). Perbedaan Tingkat Pengetahuan Para Guru SDN 064025 Medan Jantungan Sebelum dan Sesudah Diberikan Edukasi Video Animasi Heimlich Maneuver . *Skripsi. Diterbitkan Prodi Ners STIKES Santa Elisabeth Medan*.
- Sriyanto. (2015). Edukasi Mempengaruhi Kemampuan dan Pengetahuan. Universitas Trisakti
- Soekidjo. (2017). Pengembangan SDM. Jakarta: PT. Rineka Cipta.
- Suci., *et al* (2022). Pelatihan Pertolongan Pertama Pada Anak Tersedak (Choking) Di Madrasah Ibtidaiyah Al-Furqan Banjarmasin. *Universitas Muhammadiyah Banjarmasin*.
- Fakultas Keperawatan dan Ilmu Kesehatan*, Hal.50.
- Sugadha, P. (2018). Aspirasi Benda Asing Pada Anak. *Cermin Dunia Kedokteran*, 45 (2), 103-110.
- Sugiyono. (2014). *Metodologi Penelitian Kuantitatif, Kualitatif dan R & D*. Alfabeta.
- Waruwu. (2018). Gambaran Pengetahuan Perawat Tentang Training\_Heimlich Maneuver\_ Di Ruang IGD RS Santa Elisabeth Medan. *Diterbitkan STIKES Santa Elisabeth Medan*.