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# DESCRIPTION OF THE KNOWLEDGE RED CROSS YOUTH MEMBERS ABOUT FIRST AID IN TRAFFIC ACCIDENTS IN PANGANDARAN

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#### ABSTRACT

The high number of deaths or disabilities due to accidents is caused by delays in handling victims and errors in providing first aid by helpers. The Youth Red Cross, as a school health cadre, has various responsibilitys, one of which is providing first aid during accidents. Objective: the study imed to determine the knowledge of youth red cross members about first aid in traffic accidents in Pangandaran. Method: This study used descriptive quantitative research methods with a cross-sectional approach. The sample of this research is all members of RCY from senior high school 1 Parigi class X and XI, totally 76 peoples. The sampling method employed was saturated sampling. The instrument used to measure knowledge of first aid in traffic accidents was developed by the researchers and validated, with all question items proving valid and reliable (Cronbach's Alpha = 0.772). Data collection was conducted using a questionnaire administered through Google Forms. The data analysis technique employed was categorical univariate analysis. Results: The results showed that 63.2% of respondents had good knowledge, 35.5% had sufficient knowledge, and only 1.3% had poor knowledge. Conclusions: These findings suggest that the knowledge levels are influenced by the training provided by the RCY coach and the availability of a guidebook on the material.

Keywords: first aid; knowledge; red cross youth

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## INTRODUCTION

Delays in providing accident first aid have the potential to cause death and disability. Traffic accidents are the highest cause of death in the world, with 1.19 million people in 2023 (WHO, 2023). Indonesia is among the countries with the highest number of accidents causing death and disability (BPS, 2021). The number of accident cases in Indonesia in 2021 was 103,645 people, 25,266 people died, 10,553 people were seriously injured, and 117,913 people suffered minor injuries (BPS, 2021). Some victims of traffic accidents that occurred in Pangandaran Regency died. A total of 57 people who experienced accidents in Pangandaran Regency in 2022 died, 7 people were seriously injured, and 168 people were slightly injured (Polres PND, 2022). From January to August 2023, the accident data recorded in Pangandaran Regency includes 20 fatalities, 22 people with serious injuries, and 115 victims with minor injuries (Polres PND, 2023). The high number of deaths caused by traffic accidents can be caused by several factors including not obeying the rules while driving, such as driving at high speed, not using a helmet, or personal safety equipment and other factors while driving (Pebrianti et al., 2020). In addition, the cause of the high number of deaths or disabilities due

to accidents is the delay in handling victims and the first treatment errors made by people who were around the victim at the time of the incident (Winoto & Bistara, 2019).

In providing first aid in accidents, you must have the courage, knowledge, attitudes, and behavior in providing assistance to victims (Khayudin & H.S, 2021). The initial basis for attitude formation is knowledge, which is an important domain in shaping a person's actions because attitudes based on knowledge will be better than attitudes that are not based on knowledge (Livana et al., 2018). If the RCY lacks knowledge and a good attitude, then the victim is not helped but hurt (Anisah & Parmilah, 2020). This related research has been conducted in Indonesia, namely at Santo Yoseph Catholic High School Denpasar in 2022, regarding the description of the level of knowledge of first aid in accidents in high schools, the results of the study were 78.2% had a good level of knowledge (Widiastuti & Adiputra, 2022). Emergency care provided to accident victims before going to the hospital with minimal or no medical equipment to prevent death and disability, the main components of Pre-hospital measures are care for trauma victims, including helper safety, checking victim response, requesting assistance, airway, breathing, and circulation (Fiantis, 2017).

Providing first aid in accidents can be provided by helpers who have the ability to understand first aid in accidents, helpers who have the ability to first aid in accidents and helpers who are experts in the field of first aid such as the Volunteer Corps, RCI, and teenagers who are members of RCY. RCY is a forum provided by the Indonesian Red Cross as a forum for first aid in accidents inside and outside the school before being referred to the next health facility (PMI, 2015). Members of the Youth Red Cross must understand about first aid materials that contain basic first aid knowledge. As in the RCY curriculum, RCY members must know first aid and be able to practice first aid steps in accidents, therefore RCY is an organization at school that can provide first aid in traffic accidents, because other organizations at school are not given knowledge or teaching about first aid in traffic accidents (PMI, 2024). The purpose of the activities carried out by RCY is to develop in the field of knowledge, abilities and skills possessed through RCY extracurricular activities, form RCY characters who can work together with the community, improve discipline, honesty, and good organization, and RCY has a role in School Health Business activities (Kartikasiwi, 2022). RCY has the potential to provide assistance to accident victims, because RCY is side by side with the community (Rahmawati, 2020).

Pangandaran Regency is one of the districts visited by many tourists, so it is prone to accidents and based on accident data in Pangandaran Regency also has a fairly high number but the lack of health facilities, and RCY organizations in Pangandaran are also always active every year and even always hold joint training related to first aid material and other material. This study aims to fill the knowledge gap in the field of knowledge in RCY members about first aid in traffic accidents which has not been widely explored, so that the purpose of this study is to determine the knowledge of teenage red cross members about first aid in traffic accidents at senior high school 1 Parigi Pangandaran Regency.

## **METHOD**

This study used a descriptive quantitative research design using a cross-sectional approach (Sugiyono, 2015). To assess knowledge about first aid in traffic accidents among RCY members of senior high school 1 Parigi. This study has received a research ethics permit from the Research Ethics Commission of 'Aisyiyah University Bandung with ethics number 977/KEP. 01/UNISA-BANDUNG/VI/2024. The variable in this study was knowledge of first aid in traffic accidents. Knowledge is the reaction of knowing which is formed after a person

assesses certain objects, the process takes place through the five senses generally, namely vision and hearing (Notoatmodjo, 2018). The sample in the study was all members of RCY senior high school 1 Parigi Pangandaran Regency class X and XI as many as 76 people. Data were taken in June-July 2024. The sample used in this study is to use saturated sampling technique also called total sampling or census so that all members amounted to 76 people. The instrument used is a 20-question Knowledge of first aid in traffic accidents instrument specifically made to measure knowledge of first aid in traffic accidents, which was compiled by researchers and has been tested for validity and reliability tests at SMKN 2 Pangandaran to 32 RCY members. The results of the validity test using Sig 5% where r count >r table is >0.05, so that the research instrument is declared valid because each question item is obtained >0.05. While the reliability test obtained a Cronbach Alpha result of 0.772 so that the instrument was declared reliable. The instrument was made using Google Forms and then distributed through the WhatsApp group of RCY members. The data analysis used in this study was categorical univariate data analysis which aims to describe the variables according to the data obtained. Demographic and knowledge data were analyzed univariately and the results were presented in the form of frequency distribution in tabular form. The filling results obtained were then summarized and analyzed univariately. The knowledge category is good with a score of 76-100%, the knowledge category is sufficient with a score of 56-75% and the knowledge category is less <56%.

#### **RESULTS**

Table 1.

Respondent characteristics (n= 76)

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Respondent characteristics	f	%
Class		
Grade X	44	57.9
Grade XI	32	42.1
Major		
Natural Sciences	55	72.4
Social Sciences	21	27.6
Age		
12-24 Years	67	100
Gender		
Male	19	25
Female	57	75
Have received information on first		
aid in traffic accidents		
Yes	73	96.1
No	3	3.9
Traffic First Aid Media Information		
RCY	60	78.9
Mass Media	8	10.5
Teacher	2	2.6
RCI	1	1.3
Health Officer	2	2.6
Close Friend	0	0
Other	3	3.9

Table 1, most of the respondents in this study were in grade 10 as many as 44 students (57.9%). Most students are majoring in Natural Sciences as many as 55 students (72.4%). All respondents in this study were adolescents aged 12-24 years as much as 100%. The majority of RCY members are female, which is 75%. In this study, the majority of respondents had received information about first aid in traffic accidents as many as 73 students (96.1%). Most of the RCY member respondents received information about first aid in traffic accidents through the RCY organization as much as 78.9%.

Table 2.
Respondent's Knowledge (n= 76)

Respondent characteristics	f	%
Good	48	63.2
Satisfactory	27	35.5
Less	1	1.3

Table 2, it shows that knowledge about first aid in traffic accidents among RCY members of senior high school 1 Parigi Pangandaran Regency is

#### **DISCUSSION**

Based on the research results of the study, the majority of respondents came from grade X students. Grade X students usually have a high interest in being active in organizations, so they can explore their interests, skills and try new things, as well as teenagers aged 12-24 years, usually always want to try new things because of interest or curiosity to try new things (Dewi, 2021). RCY members in grade 10 and grade 11 are active members of PMR, while grade 12 is no longer an active member of RCY. Most RCY members come from science majors, because science majors have a high interest in health, and RCY focuses mainly on health. This is a motivation for students majoring in science to participate in the organization in order to increase learning opportunities and develop skills in the health sector (Resi & Ramdani, 2020).

The age of respondents in this study is adolescents aged 12-24 years because grade 10 and grade 11 of high school are classified as adolescents. Adolescents have good knowledge because adolescents have good equilibrium, where they can think flexibly and effectively (Widiastuti & Adiputra, 2022). RCY most are female, this is because there are more women than men who are interested in the health sector, and women have good care and empathy (WHO, 2019). Despite this, there are studies that discuss that in knowledge there is no difference between the mindset of women and men, because it depends on their personal ability to get information (Resi & Ramdani, 2020).

Knowledge is the reaction of knowing which is formed after a person assesses certain objects, the process takes place through the five senses generally, namely vision and hearing (Notoatmodjo, 2018). In this study, knowledge means all information that can be known, realized by RCY members about first aid in traffic accidents. In respondents who have good knowledge and the answers are correct 76%-100% of the 20 questions can be used as a start that the RCY organization can increase knowledge about first aid in traffic accidents. The knowledge of RCY members of senior high school 1 Parigi Pangandaran Regency about first aid in traffic accidents, most of 48 students (63.2%) have good knowledge, as many as 27 students (35.5%) have sufficient knowledge. Although the results of the study stated that most respondents had good knowledge, there were still many who were in the sufficient category and there were 1.3% who also had insufficient knowledge, so there is still a need for education to increase knowledge of first aid in traffic accidents. The results of this study are in accordance with previous research on high school students where 78.2% of respondents had good knowledge about first aid in accidents (Widiastuti & Adiputra, 2022). The results of another study showed that 74.5% of respondents had good knowledge, 25.5% of respondents had sufficient knowledge (Kusuma et al., 2020). Other research results also show that 41.5% of respondents have good knowledge, 51.1% of respondents have sufficient knowledge and 7.4% of respondents have poor knowledge (Rahmawati, 2020). The results showed good knowledge because they have in common that they have received information about first aid in traffic accidents.

The results of this study were also influenced by the majority of RCY members from science majors. Students who are in science majors tend to have better knowledge because the science curriculum has biology that discusses the anatomy of the human body. The learning procedure also emphasizes the use of the scientific method, and science majors have a high interest in health (Widyaningtyas & Ayuningtias, 2022). The majority of respondents answered correctly to the question about helping accident victims must be done immediately, quickly and accurately, namely 76 people (100%). This is certainly a good thing because these respondents know that helping accident victims must be done immediately, quickly and precisely in order to maintain the life of victims to save lives and reduce mortality in accident victims, prevent more severe disability in victims, prevent infection, maintain victims until the medical team arrives and prevent continued pain in victims (Rahman, 2022). First aid measures if done correctly and in a timely manner can save the victim from disability and death (Hariyadi & Setyawati, 2022).

In the domain of the purpose of first aid in traffic accidents, 71 students (93.4%) respondents also answered correctly that the purpose of providing first aid in traffic accidents is to save the victim's life. In the danger domain of first aid in traffic accidents related to the safety of the helper as well as the victim and the environment in this study when the situation of the victim of a traffic accident is not safe, the helper must move the victim to a safe position as many as 74 students (97.4%) of respondents answered correctly and had good knowledge, because this was in line with the theory of moving victims of traffic accidents (PMI, 2015). The response domain is related to the response of the helper in checking the condition of the accident victim and when asking for help (AHA, 2020). In this study, the victim was unconscious, so check the neck, namely the carotid pulse to ensure a pulse as many as 74 students (97.4%) of respondents answered correctly and had good knowledge. Domain airway stages of first aid knowledge in accidents about trauma to the neck and if there is an obstruction must maintain the victim's airway (AHA, 2020).

In the breathing domain, the stages of knowledge of first aid in accidents about victims with no breath, no pulse, and no response, the victim has cardiac arrest, so 70 students (92.1%) of respondents answered correctly and had good knowledge. In the circulation domain, the stage of knowledge of first aid in accidents about handling when there is bleeding in traffic accident victims where helpers must immediately perform pressure bandages, and in this study as many as 70 students (92.1%) of respondents answered correctly and had good knowledge. Based on the results of the study it was found that the program in the RCY organization of senior high school 1 Parigi regarding first aid in accidents can increase good knowledge for RCY members. Nursing can play a role in providing further information about the provision of first aid in traffic accidents, so RCY members not only get information from the RCY guidebook and RCY coaches as well but can receive further information from trained people.

## **CONCLUSION**

This study was conducted to determine the knowledge of RCY members about first aid in traffic accidents at senior high school 1 Parigi, Pangandaran Regency. Based on the results of the study, most respondents had good knowledge about first aid in traffic accidents. Although in some aspects of knowledge there are some RCY members who have less knowledge.

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