



## Analysis of Community Attitudes in First Aid of Traffic Accident

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### ABSTRACT

Background: Death due to traffic accidents is a global issue. The World Health Organization (WHO) showed that deaths due to traffic accidents increase in developing countries such as Indonesia and Vietnam. It is not uncommon for the result of wrong actions when providing help. It increases injury and even causes death. Aim and objective: This research aimed to identify the factor that associates to attitudes community in providing first aid to a traffic accident. It adopted a descriptive correlative study of 31 members of youth organizations in Joglo Village, Surakarta District. Its sampling was selected by systematic random sampling. Result: The logistic regression analysis revealed two factors related to attitudes. It determined that the experience and knowledge of first aid correlated with attitudes community. The greatest strength of the relationship was the knowledge (OR=2.756) and the smallest was the experience (OR=-0,004). Conclusion: Personal experiences could be the basis for attitude formation if they leave a strong impression. People who have obtained information and experience will have a better chance of giving positive attitudes to provide help

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### ABSTRAK

#### Kata kunci:

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Kecelakaan lalu lintas  
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Latar Belakang: Kematian akibat kecelakaan lalu lintas merupakan isu global. World Health Organization (WHO) menunjukkan bahwa kematian akibat kecelakaan lalu lintas meningkat di negara berkembang seperti Indonesia dan Vietnam. Kematian terjadi tidak jarang akibat dari tindakan yang salah saat memberikan pertolongan pertama. Hal ini dapat meningkatkan cedera dan kematian. Maksud dan tujuan: Penelitian ini bertujuan mengidentifikasi faktor-faktor yang berhubungan dengan sikap masyarakat dalam memberikan pertolongan pertama pada kecelakaan lalu lintas. Penelitian ini merupakan studi deskriptif korelatif terhadap 31 anggota karang taruna Kelurahan Joglo, kabupaten Surakarta. Pengambilan sampel dilakukan secara sistematis random sampling. Hasil: Hasil analisis regresi logistik menunjukkan dua faktor yang berhubungan dengan sikap yaitu pengetahuan dan pengalaman dalam memberikan pertolongan pertama. Kekuatan hubungan terbesar adalah pengetahuan (OR=2,756) dan terkecil adalah pengalaman (OR = -0,004). Kesimpulan: Pengalaman pribadi akan menjadi dasar terbentuknya sikap karna ada kesan yang kuat. Seseorang yang memiliki pengetahuan dan pengalaman akan memiliki sikap positif dalam memberikan pertolongan pertama.

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## INTRODUCTION

Reducing the death rate due to traffic accidents is one of the health development goals. The World Health Organization (WHO) in 2000-2020 shown that deaths from traffic accidents increase in developing countries such as Indonesia and Vietnam, and will decrease in developed countries such as Europe and America. The Global Status Report on Road Safety states that traffic accidents are considered to be the third largest killer under coronary heart disease and tuberculosis. Traffic accidents in Southeast Asian countries contribute more than 20% of the deaths that occur (WHO, 2015) (WHO, 2015).

There are three factors that causes traffic accidents in Indonesia, such as human vehicle and external factors (Mohammaed et al., 2019) . The main results of the 2018 Basic Health Research regarding the proportion of injuries in general that result in disrupted daily activities have increased every year from 2013 to 2018, increasing by 9.25 in Indonesia. The research results also show the proportion of places where injuries occurred in 2018, namely 31.4% on the highway, with Central Java contributing 2.5% of the total incidents in Indonesia. The highest causes of injuries due to traffic accidents were riding a motorcycle with 72.7% and riding a motorbike, namely 19.2% (Kemenkes, 2018).

Media Indonesia newspaper reports that the number of traffic accidents in Indonesia has increased with an incidence of 1197 accidents occurring in the 35th week of 2020 which resulted in 234 drivers dying and 144 experiencing serious injuries and the rest having minor injuries (Nuralam & Wijayaatmaja, 2020). The increase in the number of deaths that occurred due to traffic accidents, one of which was caused by the inaccuracy in providing first aid to victims. Not infrequently due to wrong actions when providing help, it actually increases injury and even causes death (Azzahra, 2020).

First aid in an accident is a series of first aid efforts given to sufferers which are carried out as quickly and precisely as possible with the aim of saving the victim from death or preventing the injury from getting worse. The success of first aid in patients depends on; speed of finding victims, speed of rescuer response, ability and quality of helpers and speed of asking for help (Pek, 2017). Traffic accidents can happen to anyone regardless of location. The expected attitude is that the community can be responsive to events and can provide first aid appropriately and quickly (Irman, 2019).

The community has an important role in reducing the number of disabilities and deaths among traffic accident victims. In their role, the community can provide first aid as individuals who are generally at the scene of the incident for the first time (Azzahra, 2020). This research aims to identify factor which relationship with attitudes of community in providing first aid to traffic accident.

## METHOD

### *Research participants*

Respondents in the study were Karangtaruna, Joglo village aged 17-55 years and were willing to be respondents with a total of 31 respondents. The sampling technique used was systematic random sampling.

### *Research procedure*

This type of research was observational using a descriptive correlation design. This research was conducted with the steps of conducting a preliminary study, arranging a research permit, and collecting planned data. The survey was conducted through a questionnaire provided via Google form with the address <https://forms.gle/rYR3npJ3yCgf8Bec9> which can be accessed by respondents via each respondent's mobile phone. After completing data collection, data analysis was carried out using SPSS.

### *Instrument*

The instrument in this study used 3 questionnaires; namely demographic data, questionnaires about attitudes in the cognitive dimensions of society in first aid, and questionnaires on attitudes in the cognitive dimensions of community behavior in first aid whose validity has been tested where the results of the r count are in the range 0.459-0.687 ( $> r$  table 0.444) and the alpha value cronbach = 0.765 ( $> 0.60$ ) for 15 respondents. Thus, this questionnaire had been valid and reliable.

### *Data Analysis*

Data analysis used in this research was multiple logistic regression analysis.

## RESULT AND DISCUSSION

**Table 1.**  
**Characteristics of Respondents (n = 31)**

Characteristics of Respondents	Frequency	%
<b>Sex</b>		
female	8	25,8
male	23	74,2
<b>Education</b>		
Senior High School	21	67,7
University	10	32,2
<b>Experience</b>		
Has never been	23	74,2
Ever been	8	25,8

Table 1 showed that the majority of respondents were male, 74.2% (23 respondents), and the majority of high school education level was 67.7% (21 respondents). The frequency distribution also presented that 74.2% (23 respondents) had never any experience in helping traffic accident victims and 25.8% (8 respondents) have already provided assistance to traffic accident victims.

Table 2 showed that 52.2% of people who have never had the experience of providing accident assistance had a negative attitude, and 47.8% a positive attitude. Meanwhile, people with experience in providing help were 12.5% who had negative attitudes and those who had positive attitudes were 87.5%. The general attitude of the community in general had a positive attitude of 58.1% in providing assistance to victims of traffic accidents. Meanwhile, the value of the relationship between the experience factor of providing help with the attitude of the community in providing help was  $p = 0.047$ . Because the  $p$  value  $< 0.05$ , statistically, there was a relationship between educational history and public attitudes.

**Tabel 2.**  
**The Relationship between Experience Factors and Attitudes**

		Attitude of Society				p value
		Negative		Positive		
		n	%	n	%	
Helpful Experience Knowledge	Has never been	12	52,2	11	47,8	0,047
	Ever been	1	12,5	7	87,5	
	Total	13	41,9	18	58,1	
Informasi sebelumnya	Has never been	12	70,6	5	29,4	0,000
	Ever been	1	7,1	13	92,9	
	Total	13	41,9	18	58,1	

Based on table 3, it was found that the greatest relationship strength data was seen from the OR (Odd Ratio) results. The greatest strength of the relationship was information (OR = 2.756) and the smallest was the value of experience (OR = 0.044).

Traffic accidents could happen anywhere and anytime to everyone. So that each individual in the community could act as a helper and provide rescue actions to save lives. First aid is the first life-saving action given by someone before the

availability of professional help (Woodward et al, 2018). First aid measures in an accident include an assessment of the victim's awareness and if necessary immediately move the victim from the scene to a safe place. The next step is early assessment, by checking the victim's awareness, checking the victim's airway and breathing status, conducting circulation, physical checks, and providing treatment according to the victim's injury (Canterbury & Hunt, 2017; Pek, 2017).

**Table 3**  
**Analysis of the Factors Most Related to attitudes**

	Koefisien	S.E.	Wald	df	Nilai p	OR	IK95%	
							Lower	Upper
Helpful Experience	-3,114	1,417	4,826	1	0,047	0,044	0,003	0,715
Knowledge	21,737	12871,887	0,000	1	0,000	2,7569	0,000	.
Konstanta	-19,814	12871,887	0,000	1	0,998	0,000		

Table 2 provided an overview of the general attitudes of the community, the majority of which had a positive attitude of 58.1% in providing assistance to traffic accident victims. This could be seen from the majority of respondents who had the right answer in responding when a traffic accident occurs to immediately provide assistance. In addition, the majority of respondents understood that first aid conducted properly will save the victim from death. In line with these results, previous research showed that most people have a positive attitude about first aid for traffic accident victims (Aji, 2017).

Attitude is an important component in the human psyche that will influence one's behavior. Attitude affects all decisions that will be chosen. The formation of attitudes in providing first aid in emergency conditions starts from the cognitive domain of the attitude itself (Notoatmodjo, 2004). Individuals will recognize these subjects and objects as something that needs to be done in terms of cognitive abilities in doing help (Kase et al., 2018).

Based on Table 2, the results of this study showed that p = 0.047. Therefore, there was a relationship between experience and people's attitudes. The results of this study also supported previous research that people tend to have negative attitudes in providing first aid to traffic accident victims. This negative attitude could arise because someone has never had personal experience or received information related to first aid in traffic accidents (Irman, 2019). The results showed that 74.2% of respondents never had the previous experience of helping. It proved the previous results, where one of the factors a persons' attitude because they have knowledge that could be sourced from personal experience or information previously received (Aji, 2017).

Attitudes have levels based on their intensity such as accepting, responding to, appreciating, and being responsible for an object (Notoatmodjo, 2004). The more positive a person's attitude, the more responsible he feels for something he meets. As shown by the majority of respondents' attitude of providing first aid in order to save the lives of traffic accident victims.

This was in line with the theory that one of the factors forming an attitude is a person's personal experience. Especially the attitude will be easily formed if it involves emotional factors. Someone who has given help will have an impression of the incident and will affect his emotional. This will be valuable for individuals (Notoatmodjo, 2004).

The results of this study reinforced the results of previous studies that general public knowledge was still lacking by providing inappropriate assistance. People who have good knowledge in providing first aid will be able to provide the right first aid action to accident victims (Kase et al., 2018). Personal experiences can form the basis for attitude formation if they leave a strong impression. Attitudes will be easier to form if these personal experiences occur in situations that involve emotional factors (Aji, 2017). Attitude is a trigger for each individual to bring up a behavior. Behavior and decisions to do or not do something (Irman, 2019).

This can also be seen from the results of the answers of respondents who have the majority of experience answering correctly what must be done when meeting victims of fractures or back injuries, the helper can move them using a stretcher, so they cannot be lifted directly, especially if the helper is alone.

Experience is an important factor for individuals to behave. Experience could be obtained through the previous learning process. A person who has received information about first aid actions or provides first aid directly, or has seen first-hand the first aid process will have a picture in providing aid. This will be a strong factor in determining attitudes. Such as the act of calling for help and providing an appropriate evacuation process to victims while providing assistance to accident victims. A person who has had experience in handling accident victims before, will immediately be able to determine an attitude and be more structured and systematic in providing assistance.

Experience gives someone access to knowledge about something, which can recall events that have been experienced either intentionally or not. Someone who has given first aid in an accident will remember the actions that were given at that time and things that must be anticipated (Okvitasari, 2017). This is proven by the answers given by the respondents, the majority of respondents understood that for traffic accident victims who had bleeding, they had to put pressure on them with a clean cloth to stop the bleeding. This attitude can be shown by those who have previous experience in handling accident victims who experience bleeding.

Attitude is an important component in the human psyche that will influence a person's behavior. Attitude affects all decisions that will be chosen. Based on (Notoatmodjo, 2004) Attitudes is the result of continuous human learning in the process of growth and development. So that attitudes can be grown and developed through the learning process. Attitudes have several characteristics, including: direction, intensity, breadth, consistency and spontaneity. Characteristics and directions indicate that attitudes can lead to whether or not an individual agrees, supports or rejects the object of attitudes.

### Limitation of The Study

The number of respondents in this study was not large enough because it only took samples from one youth organization in one village.

### Conclusion and Recommendation

Based on the research results, factors related to people's attitudes in providing first aid were education and experience. Experience provided someone access to knowledge of something so that it could affect attitudes.

### Recommendation

This research could be further researched by looking at each value from the attitude aspect to the cognitive and affective aspects. In addition, there are several factors that influence people's attitudes to be observed, such as cultural factors and self-efficacy.

### Conflict of Interest Statement

This research is sourced from the author's personal ideas as stated in the author's research roadmap. The author is interested in knowing how far the community's attitude and role in first aid are in the pre-hospital setting. This research was then continued by the author by providing interventions to the community regarding the findings obtained in the study. The interventions provided were in the form of health

education measures to infrastructure preparation for relief activities. All of which are included in the author's research road map from 2018 to 2022. All costs used in this research are internal research funds provided by Kusuma Husada University Surakarta.

### REFERENCES

- Aji, A. K. (2017). Sikap dan Perilaku Masyarakat tentang pertolongan Pertama korban kecelakaan lalu lintas Sekolah Tinggi Ilmu Kesehatan insan Cendekia Medika]. Jombang.
- Azzahra, S. M. (2020). Hubungan pengetahuan dan sikap dengan perilaku masyarakat mengenai pertolongan pertama pada korban kecelakaan lalu lintas di kelurahan Plaju ilir. In. Palembang: Fakultas Kedokteran Universitas Sriwijaya.
- Canterbury, D., & Hunt, J. A. (2017). *Bushcraft First Aid; A field Guide to Wilderness Emergency car*. Adams Media.
- Irman, O. (2019). Sikap dengan Motivasi dalam memberikan pertolongan pertama kasus kecelakaan lalu lintas pada siswa siswi SMK Negeri 1 Maumere. *Journal of Nursing Care and Biomelecular*, 4(1), 5-11.
- Kase, F. R., Prastiwi, S., & Sutringrum, A. (2018). Hubungan Pengetahuan masyarakat awam dengan tindakan awal gawat darurat kecelakaan lalu lintas di kelurahan Telogomas kecamatan Lowokwaru Malang. *Nursing news*, 3(1), 662-674.
- Kemendes. (2018). Hasil Utama Riset Kesehatan Dasar
- Mohammaed, A. A., Ambak, K., Mosa, A. M., & Syamsunur, D. (2019). A review of the Traffic Accidents and Related Practice Worldwide. *The Open Transportation Journal*, 13, 65-83. <https://doi.org/10.2174/1874447801913010065>
- Notoatmodjo, S. (2004). Pendidikan dan perilaku Kesehatan. Rineka Cipta.
- Nuralam, C. Y., & Wijayaatmaja, Y. P. (2020). Jumlah Kecelakaan lalu lintas di Indonesia meningkat. *Media Indonesia*.
- Okvitasari, Y. (2017). faktor-faktor yang berhubungan dengan penanganan bantuan hidup dasar (basic life support) pada kejadian kecelakaan lalu lintas di SMK. *caring nursing journal*, 1(1), 6-15.
- Pek, J. H. (2017). Guidelines for Bystender First Aid 2016. *Singapore Med J*, 58(7), 411-417.
- WHO. (2015). *Global Status Report On Road Safety*.