

EFFECTIVENESS OF SAFETY RIDING EDUCATION METHODS AND MEDIA TO ADOLESCENT IN JEMBER REGENCY

Efektivitas Metode dan Media Edukasi Program Safety Riding pada Remaja di Kabupaten Jember

Farida Wahyu Ningtyias¹
Public Health Study Program
Faculty of Public Health
Universitas Jember
Jl. Kalimantan I/93 Jember
farida.fkm@unej.ac.id

Iken Nafikadini
Public Health Study Program
Faculty of Public Health
Universitas Jember
Jl. Kalimantan I/93 Jember
iken.nafikadini@gmail.com

Afif Hamdalah
Public Health Study Program
Faculty of Public Health
Universitas Jember
Jl. Kalimantan I/93 Jember
afif@unej.ac.id

Irfan Rifa'i
Faculty of Teacher Training and
Education
Universitas PGRI Adi Buana
Jl. Dukuh Menanggal XII
Surabaya
irfan.rifai@unipasby.ac.id

Triati Dewi Kencana Wungu
Physics Study Program
Faculty of Mathematics and
Natural Sciences
Institut Teknologi Bandung
Jl. Ganesha No. 10 Bandung
triati@fi.itb.ac.id

Abstract

Traffic accidents are the third largest killer in the world under coronary heart disease and tuberculosis. Based on the Indonesia Transportation Outlook, there are four factors that cause accidents, namely the condition of transportation infrastructure, human factors, and nature. However, human negligence is a major factor causing the high number of traffic accidents. Research on the feasibility and effectiveness of methods and educational media for riding safety programs for teenage motorbike users needs to be done. The study was conducted in Jember Regency in 4 schools which were divided into schools that received intervention on safety riding and not. The results show the method used in the form of counseling with the help of media in the form of power points. There is no difference in attitudes and actions between groups that get intervention and not. However, there are a small number of groups that do not get an intervention that has a bad attitude and behavior. Safety riding counseling at school can increase knowledge so that it is expected to provide behavioral changes to students to drive safely.

Keywords: education, safety riding, teenage

Abstrak

Kecelakaan lalu lintas merupakan pembunuh ketiga terbesar di dunia di bawah penyakit jantung koroner dan *tuberculosis*. Berdasarkan *Outlook* Transportasi Indonesia, terdapat empat faktor penyebab kecelakaan, yakni kondisi sarana prasarana transportasi, faktor manusia, dan alam. Namun demikian, kelalaian manusia menjadi faktor utama penyebab tingginya angka kecelakaan lalu lintas. penelitian mengenai kelayakan serta efektivitas metode dan media edukasi program *safety riding* pada remaja pengguna motor perlu dilakukan. Penelitian dilaksanakan di Kabupaten Jember pada 4 sekolah yang terbagi menjadi sekolah yang mendapatkan intervensi tentang safety riding dan tidak. Hasil menunjukkan metode yang dipakai berupa penyuluhan dengan bantuan media berupa power point. Tidak ada perbedaan sikap dan tindakan antara kelompok yang mendapatkan intervensi dan tidak. Namun kelompok yang tidak mendapat intervensi ada sebagian kecil yang memiliki sifat dan tindakan yang buruk. Penyuluhan safety riding di sekolah dapat meningkatkan pengetahuan sehingga diharapkan bisa memberikan perubahan perilaku pada siswa untuk aman berkendara.

Kata kunci: edukasi, safety riding, remaja

¹ Corresponding author: Farida Wahyu Ningtyias (farida.fkm@unej.ac.id)

INTRODUCTION

Traffic accidents are the third largest killer in the world under coronary heart disease and tuberculosis (WHO, 2011). According to the Global Status Report on Road Safety (2013) made by WHO, as many as 1.24 million victims die each year worldwide due to traffic accidents. According to the National Police Traffic Corps (in the Indonesia Road Safety Award, 2013) the number of accidents in Indonesia during 2012 reached 117,949 accidents. The number of accidents in 2012 increased by 8% from the number of accidents in 2011 which reached 109,776 accidents. The accident rate in 2012 caused material losses of up to Rp. 298,627,130,430.00. The impact of traffic accidents in Jember Regency from 2011 to 2014 caused 117 deaths, 53 serious injuries, 560 minor injuries and Rp. 244,140,000.00.

Based on the Indonesia Transportation Outlook (2013), there are four factors that cause accidents, namely the condition of transportation infrastructure, human factors, and nature. However, human negligence is a major factor causing the high number of traffic accidents. According to the East Java Provincial Parliament (2013) looking at the cause of the accident, 80% was caused by human error, while the rest was due to vehicles, road infrastructure, weather factors, and others. Based on the number of accident cases, at least 70% are two-wheeled vehicles, the rest are cars and other large vehicles.

According to the State Intelligence Agency (2012) as many as 67% of victims of traffic accidents are in the productive age, namely the age of 22-50 years. There are around 400,000 victims under the age of 25 who die on the highway, with an average death rate of 1,000 children and adolescents every day. Even traffic accidents are the main cause of death of children in the world, with an age range of 10-24 years. It was also mentioned that the accident, which was dominated by young, adolescent and productive victims, also came from poor communities of motorbike users and public transportation. Basic Health Research (2013: 101) also shows the tendency for the most accidents to increase at the age of 15-24 years, male, high school graduate, employee status, and top quintile. The proportion of land transportation injuries (motorbikes and other land transportation) from 25.9% to 47.7%. Accidents in East Java occurred as many as 24,985 accidents with the highest number of fatalities reaching 5,915 people (Indonesia Road Safety Award, 2013), which was dominated by teenage and productive victims.

Adolescence is defined as a period of emotional change and social change. Adolescence illustrates the impact of physical changes, and deep emotional experiences. According to Goleman (2002: 411) emotions refer to a specific feeling and thought, a biological and psychological state and a series of tendencies to act. Emotional conditions of adolescents who tend to be unstable can be handled by providing social support which ultimately leads to the stage of adolescent self- efficacy. Teenagers who have high self-efficacy are able to regulate their emotions so that they are able to drive safely (for example, can determine a safe distance between drivers which is about 5-4 meters with a maximum speed of 40 km / hour), tend to be calm, and comply with traffic rules through complete conditions vehicles (for example, rearview mirror mounted on the right and left), driving equipment (including helmets, masks, gloves and shoes), and driving documents (including Driving License and STNK).

The safety riding program (driving safely and correctly) should be an effort to provide social support to teenagers so that they can improve their self-efficacy while driving. During this time the driving points are safe and true are often ignored by teenagers. Traffic accidents

involving adolescents are classified as high because the majority of traffic offenders who tend to be reckless on the road are unscrupulous youth and adolescents (DPKIT in Ratnasari et.al, 2014: 2). Safety riding programs in schools by providing education to adolescents is a good preventive effort, but it also needs to be supported by correct delivery methods and media that are attractive to adolescents, so that the program can be effective in youth groups. At present several safety riding fostered schools have also begun to be formed in East Java, making it easier for the police to provide education for the safety riding program to adolescents. The main factors causing accidents in East Java are driver factors, and preventive efforts are needed by providing education using effective methods and media to teenage students so that an increase in understanding and self-efficacy for safe and correct traffic, so that research on the feasibility and effectiveness of methods and education media for riding safety programs for teenage motorbike users needs to be done.

RESEARCH RESULTS AND DISCUSSION

This research was conducted in Jember Regency, with respondents coming from 4 schools, each of 2 (two) schools representing schools that received the Safety riding program (received intervention) and 2 (two) other schools that had never received the program (did not receive intervention). Next, the researchers conducted interviews with the school and police officers related to the program. Schools that were selected purposively in this study were SMPN 2 Jember and SMPN 10 Jember, which represented schools that received the intervention / safety riding program. Meanwhile, SMPN 5 Jember and SMPN 9 Jember represented schools that did not receive the intervention / did not receive the Safety riding program. The total number of respondents was 161 students. Whereas the interview was conducted with 1 (one) teacher in each school, so that the total main informant was 4 teachers.

Distance of research varies. 2 (two) schools that received the intervention of the safety riding program, namely SMPN 2 Jember and SMPN 10 Jember, are located in the middle of the city. Whereas 2 (two) other schools, namely SMPN 5 Jember and SMPN 9 Jember are located on the edge of the city, espec Distance of research varies. 2 (two) schools that received the intervention of the safety riding program, namely SMPN 2 Jember and SMPN 10 Jember, are located in the middle of the city. Whereas 2 (two) other schools, namely SMPN 5 Jember and SMPN 9 Jember are located on the edge of the city, especially SMPN 9 Jember which is located quite far from the city center. This is why the safety riding program is still not targeted at schools with great distances from the city center. Based on these pictures, it can be seen the distance from the city center of Jember Regency. Schools that are intervened by the safety riding program are no more than 2 KM, while for schools that have not been intervened the program is more than 4 KM from the city center.

Characteristics of Adolescents

Characteristics of adolescents (including age and sex) recipients of the Safety Riding program and not the recipients of the Safety Riding program in East Java Province. The number of respondents in schools that have received a safety riding program is less than that of schools that did not receive the program, this happened because when students were collecting data at SMPN 2 and SMPN 10 Jember there were Class Meeting activities so students involved in the research activities were selected by students who did not

attend school activities. But if you pay attention to the difference between the groups that get the program and not, it's not that big. The interventions obtained by the two schools were a program in the form of counseling about traffic order, the danger of driving a school child, and drug abuse. The frequency of the orderly socialization activities of the traffic provided by the Jember Police Resort Traffic Unit was very frequent, because the school invited the Satlantas to come to give directions during the flag ceremony and the Student Orientation Period (MOS) activities of the school. Following is the distribution of students based on recipients of the safety riding program intervention.

Table 1. Student distribution based on recipients of the Safety Riding Program

Safety Riding Program	n	(%)
Do Not accept Intervension	87	54,0
Accept Intervention	74	46,0
Total	161	100,0

Safety riding activities are carried out in Jember Regency junior high schools by the Jember District Police Satlantas in collaboration with the Jember Regency Education and Culture Office. The activity was scheduled but for scheduling the researchers did not find written documentation. Even though the intervention of the safety riding program has been carried out in the respondent's school, the evaluation of the program has not been carried out either from the school or from the Jember Police Department Traffic Police. Increased knowledge, attitudes, and actions of students who have been exposed to information about safety riding have not been measured at all, so the effectiveness of these activities is not known beforehand. Furthermore, the distribution of respondents based on age and sex characteristics can be seen in the following table.

Table 2. Student distribution based on sex

Safety riding Program	Sex				Total	
	Man		Woman		n	%
	n	%	n	%		
Do Not accept Intervension	54	33,5	33	20,5	87	54,0
Accept Intervention	33	20,5	41	25,5	74	46,0
Total	87	54,0	74	46,0	161	100,0

Most respondents were male, which was 54%, but if it was seen based on the treatment group, it was different between the recipients of the Safety riding program, namely more men (33.5%) in the group that did not receive the Safety riding program while in the group. those who received the Safety riding program were more women at 25.5%.

Table 3. Student distribution based on age

Safety riding Program	Age						Total	
	13 yo		14 yo		15 yo		n	%
	n	%	n	%	n	%		
Do Not accept Intervension	43	26,7	17	10,6	27	16,8	87	54,0
Accept Intervention	14	8,7	30	18,6	30	18,6	74	46,0
Total	57	35,4	47	29,2	57	35,4	161	100,0

Respondents in this study were teenagers who sat in junior high school, with an age range of 13-15 years. The results showed that the group that received the Safety riding program were mostly in the age group of 13 years (26.7%), while the group that received the Safety riding program were mostly in the age group of 14 and 15 years, respectively by 18, 6%. Safety riding programs are mostly carried out in groups of adolescents aged 15-19 years, because in these age groups accident risk behavior. This happens because in this age group is the most active phase in life, physical and social, and its intensity exceeds other road users (Singha, in Nevri 2010: 2).

According to PT Jasa Marga (in Dwiyoogo, 2006: 2), accidents cause minor injuries, serious injuries, and death. Deaths due to traffic accidents continue to increase, and currently become the eighth leading cause of global death and death in the age group of 15-29 years. Based on previous research it was stated that every 1 victim died behind him there were at least 10 victims of serious injuries and 100 accidents with only material losses. This theory is called the pyramid theory, which is behind 31,234 fatalities there are 312,340 seriously injured victims (Najid, 2014:4). Based on interviews with the school (SMPN 2 Jember and SMPN 10 Jember), prior to the intervention of the Jember District Police Satlantas, many students brought the school. Then the school issued an appeal for a ban for students to bring motorbikes to school, but students there continued to bring them to school, so the school used another way, namely by inviting the Satlantas to provide socialization.

Based on the interview it was also found that school students did not lose their minds after being appealed, some of them still brought back their vehicles, but they did not park at school, but in public places that had parking lots, namely in the Hospital. The same thing also happened at SMPN 2 Jember, where students also still brought motorbikes and parked them at Jember Clinic Hospital, even though the school had appealed to their students not to bring private vehicles.

After the Satlantas gave directions to students in these schools, several actions were taken by the school. Starting from confiscating motorbikes from students who bring their motorbikes to school, then then calling on students' parents to be given directions. Guidance to students' parents not only stops when the child no longer carries a private vehicle, but also at the time of receipt of report cards. At that time, the homeroom teacher will tell the student guardians not to give permission for students to bring private vehicles by conveying logical reasons to the student guardians so that they receive with full awareness of that information. Key Informant (Ipda Agus Yudi Kurniawan) also stated that some had been invited by the school to socialize the understanding of the traffic order to parents of guardians of students. Even the socialization and question and answer discussion was carried out directly with 2 (two) targeted targets, namely students and their

parents. According to him it has been effective in reducing the number of motorized motorists in their teens as they are still unable to obtain a Driving License (SIM) C. In accordance with Articles 81 and 83 of the Road Traffic and Transportation Law No. 22 of 2009 it is stated that SIM C can be obtained with a minimum age requirement of 17 years and passed the theory, practice and simulator tests as well as passing administrative requirements and physical and mental health requirements. While for junior high school children the age limit requirements for them have not been met.

But for schools that have not yet been intervened and have not received a safety riding program the appeal not to bring a motorcycle is not as strict as the school being intervened. One of the main informants from Jember 9th Middle School (M, 52 years old) stated that there were still many children who were carrying motorbikes and the school still could not regulate it. Even the informant stated that it is better for students to still be allowed to bring motorbikes and the school has prepared a motorbike parking facility so that students' vehicles remain safe at school. The informant said this because there were a large number of students' private vehicles paraded outside, so the risk of loss would be even greater.

Describe the Methods and Media Used

Describe the Methods and Media used in the Safety Riding education program for teenage motorbike users in East Java Province:

Safety Riding Program Method

The interview results show that the method of delivering education of the Safety riding program is conducted by police officers through lecture methods through special counseling activities for students and through ceremonial activities by becoming a ceremony inspector. Scheduling of these activities is carried out in collaboration with the Department of Education and Culture of Jember Regency. The material presented in this activity included the danger of driving for school-aged children who are not old enough, about juvenile delinquency and also the abuse of narcotics and addictive substances. Material that is not only focused on safety riding is considered beneficial because the moment of counseling at school is considered appropriate so it is expected that the material delivered can be accepted and applied by students.

The benefits felt by the school with the Safety Riding program include that students no longer bring motorbikes to school. Usually students bring motorbikes to school because of reasons that the house is far from school and parents cannot take them to school. However, due to the current zoning system the distance of schools and homes is closer so the opportunity to bring motorbikes is getting smaller. The school follows up on police activities coming to this school with the rule that it is not allowed to bring motorbikes to school and hopes that this activity will be routed because even though it is currently scheduled, the distance between activities is long.

Safety Riding Media Program

The media used in the Safety riding program are material that is presented in a PowerPoint file, which contains messages about safe driving, terms and conditions of driving. Counseling is done in the form of lectures with real examples so that it can be the learning of students. To broaden the scope of the target of safety riding education activities delivered

at the ceremony on Monday so that all students can get the material by the way police officers become ceremonial inspectors.

In the socialization about the dangers of driving by the Jlanda District Satlantas using media in the form of power points. Power Point media has now been widely used in the teaching process in schools, especially in lectures. At present many universities that provide teaching facilities use Power Point media to make it easier for teachers to deliver the material to be delivered so that teaching does not feel boring.

Analyze the effectiveness

Analyze the effectiveness of methods and educational media for the Safety riding program for teenage motorbike users in East Java Province. Results of Analysis of Influence Test Based on Acceptance of Intervention and Knowledge An important factor in safe driving is driving knowledge. Drivers must know the applicable traffic rules, traffic signs and so forth. From this knowledge can describe a person's ability to drive a vehicle. A person's ability to drive can be judged by his knowledge (Jukangko, 2013 in Sumantri and Misbahudin, 2017).

Table 4. Relationship based on intervention acceptance and knowledge

Safety riding Program	Knowledge						p-value	OR(95%CI)
	Poor		Medium		Good			
	n	%	n	%	n	%		
Do Not accept Intervention	10	6,2	70	43,5	7	4,3	0,000*	1
Accept Intervention	0	0	32	19,9	42	26,1		0,067 (0,027-0,164)

Based on the results of the analysis, it is known that the p-value = 0,000 ($p \leq 0.05$) and can be interpreted that H0 is rejected. This shows that there is a relationship between knowledge and intervention. The OR value for students who received the intervention was 0.067, so it can be concluded that students who received the intervention were protective factors or factors that could prevent students from having poor knowledge.

CONCLUSIONS

1. Most of the students involved in the study were boys with a range of 13-15 years, mostly 13 and 15 years.
2. The method used in the delivery of safety riding material is counseling with the help of media in the form of material in the form of power points / ppt. There is no difference in attitudes and actions between groups that get material about safety riding or not, but in groups that do not get safety riding material there are a small proportion of students who have negative / bad attitudes and actions about safety riding. Most students have a moderate level of knowledge, but in the group that does not receive material on safety riding there are still those who have a level of knowledge in the low category and only a few have a level of knowledge in the good category when compared to the group that receives material about safety riding.
3. The media used in the form of material in the form of power points are considered quite good, but require some improvement in terms of content, visualization as well as colors

and images so as to make messages more easily accepted by the target, namely teenagers.

4. Media and methods used in the delivery of safety riding can increase student knowledge, it is expected that attitudes and actions that tend to be positive coupled with a good level of knowledge become provision for changes in the behavior of students to safely drive.

ACKNOWLEDGMENTS

Thank you to the Principal of Jember 2 Public Middle School, Jember 5 Public Middle School, Jember 9 Public Middle School, and Jember 10 Public Middle School for allowing researchers to interview students, and thank the Korlantas Polri for providing funding for this research.

REFERENCES

- Badan Intelijen Negara. 2012. Kecelakaan Lalu Lintas menjadi Pembunuh Terbesar Ketiga. (serial online). <http://www.bin.go.id/awas/detil/197/4/2/01/2014/kecelakaan-lalu-lintas-menjadi-pembunuh-terbesar-ketiga>.
- Chrussiawanti, N., Hapsari, H.I dan Rufaidah Nur Fitriana. 2015. Hubungan Tingkat Pengetahuan dan Kepatuhan Safety Riding pada Remaja di SMA Negeri 2 Sukoharjo. Skripsi. Surakarta: Stikes Kusuma Husada.
- Dwiyogo, P. 2006. Faktor-faktor Penyebab Kecelakaan Lalu Lintas. (serial online). http://eprints.undip.ac.id/38422/2/Bab_1.pdf.
- Goleman, Daniel. 2013. Kecerdasan Emosional, terjemahan T. Hermaya. Cetakan XIII. Jakarta: Gramedia Pustaka Utama.
- Indonesia Road Safety Award. 2014. Sebuah Apresiasi bagi Pemerintah Daerah untuk Penerapan Tata Kelola Keselamatan di Jalan (Road Safety) Terbaik. (serial online). <http://roadsafetyaward.co.id/wp-content/uploads/2014/01/SWA-edisi-26-9-18-Desember-2013-hal.-26-29-IRSA.pdf>.
- Najid. 2014. Estimasi Tingkat Kecelakaan Lalu Lintas Nasional dan 6 Provinsi di Pulau Jawa Indonesia. Jurnal Transportasi, Vol. 10, No. 2. Pp.125-134.
- Notoatmodjo, S. 2005. Promosi Kesehatan Teori dan Aplikasinya. Jakarta: Rineka Cipta.
- Outlook. 2013. Kecelakaan Lalu Lintas Penyebab Kematian Peringkat ke-8 di Indonesia. (serial online). <http://dishub.jabarprov.go.id/inc/data/info/550>.
- Ratnasari, F.,Kumaat, T., Mulyadi. 2014. Hubungan Karakteristik Remaja dengan Kejadian Kecelakaan Lalu Lintas pada Komunitas Motor Sulut King Community Manado. (serial online). <http://ejournal.unsrat.ac.id/index.php/jkp/article/download/6075/5586>.
- Riset Kesehatan Dasar. 2013. Laporan Hasil Riset Kesehatan Dasar 2013. (serial online). <http://terbitan.litbang.depkes.go.id/penerbitan/index.php/blp/catalog/book/64>.
- Sumantri, A.S dan Misbahudin, I. 2017. Faktor yang mempengaruhi keselamatan berkendara di ruas jalan tol Semarang-Bawen Propinsi Jawa Tengah. Jurnal Saintek Maritim. XVI(2):132-142.
- Universitas Gadjah Mada. 2014. Hubungan Antara Lokasi Perlukaan Tubuh yang Fatal pada Korban Meninggal Kasus Kecelakaan Lalu Lintas dengan Membandingkan Posisi Pengemudi atau Membonceng yang Diperiksa di Instalasi Kedokteran Forensik RSUP Dr. Sardjito Yogyakarta. (serial online). <http://repository.ugm.ac.id/downloadfile/.../S1-2014-299614- chapter1.pdf>.

- World Health Organization. 2011. Decade of Action for Road Safety 2011- 2020. <http://www.who.int/roadsafety/en/>. Jenewa: World Health Organization.
- World Health Organization. 2013. Global Status Report on Road Safety 2013: Supporting a Decade of Action. WHO: Geneva, Switzerland.
- Wesli. 2015. Pengaruh Pengetahuan Berkendaraan Terhadap Perilaku Pengendara Sepeda Motor Menggunakan SEM. Teras Jurnal. V(1). 43-51.