# How to reduce the risk of motorcycle accidents? Implementation of coordination between the police, schools and, communityhealth centers

## Lutfi Irvan Ansori<sup>1</sup>, N Bilqis<sup>1</sup>, Setya Haksama<sup>1\*</sup>

## \*Corresponding Author: Setya Haksama

Department of Health Policy and Administration, Faculty of Public Health, Universitas Airlangga, East Java, Indonesia

Campus C, Jl. Dr. Ir. H. Soekarno, Mulyorejo, Mulyorejo, Surabaya, East Java Indonesia, postal code: 60115

Email: setyahaksama@fkm.unair.ac.id

Abstract. Indonesia is a country with high number of road traffic accidents. The number of accidents in January-March 2017 was 43.121 cases, and the number of motorcycle accidents approximately 31,247 cases. Coordination is an important factor needed to solve a particular program or problem involving two or more institutions. This study aims to analysis the coordination of the police, schools, and community health centers in the District of Krian on reducing motorcycle accidents. This research used descriptive method with cross-sectional approach. Data collectedthroughquestionnaires and distributed to 14 officers in the Krian police agency, , high school, andKrian communityhealth center. The respondents selectedby purposive sampling. The result showed the study shows that 64.3% of respondents claimed always need coordination, 42.9% of respondents always obeyed in carrying out the leadership's instructions, 50% of officers often carry out informal communication. The obstacles that occur in the implementation of coordination is the ignorance of other agencies, regarding the role of community health centers in traffic accident prevention efforts. It can be concluded that the implementation of coordination between the police, schools and health centers is good.

Keywords: accident prevention agency, coordination, motorcycle accident, traffic accident

#### 1. Introduction

Indonesia is one of the countries with the highest number of traffic accidents in South-East Asia. Traffic accidentsbecome the leading cause of the Global Burden Disease (GBD).In2010, Indonesia ranked in the top 19 non-infectious cause of death. In 2013, World Health Organization (WHO),reported approximately 38,279 fatalities due to traffic accidents.Motorcyclists and their passengers make up 36% of the traffic accidents.Most victims of traffic accidents were those in productive age. WHO stated that at the global level in 2013 there were almost 60% of deaths due to traffic accidents. This case occurred between the ages of 15-44 years old and more than 300,000 deaths occurred in the age group of 15-29 years old[1].

Data from the National Traffic Police Corps Republic of Indonesia (*Korps Lalu Lintas Kepolisian Republik Indonesia*) from January to March 2017 states that the most traffic accidents in Indonesia happened to people between the ages of 15-19 with 4,414 victims [2]. The 2015 Global Status Report on Road Safety states that nearly half of all causes of death from traffic accidents were those with little protection of their safety.

Motorcycles are the leading cause of traffic accident fatalities in Indonesia.. In the last two quarters of 2016, there were 32,004 traffic fatalities cases, while in the beginning of 2017 there were 31,247 cases[2]. However, from January to March 2017, traffic accidents caused by motorcycle decreased by 2% compared to October-December 2017. [2].

East Java is the largest province on Java Island with 38 districts/cities. Among those districts/cities, Sidoarjo always occupied the top five highest traffic accident rates from 2013 to 2017 [3]. Sidoarjo is the regency that crowned as the highest risk of traffic accidents in East Java [3]. The number of traffic accidents in Sidoarjo in 2017 reached 1,436 risks. The case also increased by 1.3% from the previous year

<sup>&</sup>lt;sup>1</sup> Department of Health Policy and Administration, Faculty of Public Health, Universitas Airlangga

which was 1,417 risks of traffic accidents [3].

Coordination playsan essential role in resolving problems between institutions.. Coordination is one of the management functions playing an equal role and importance to other management functions. The success of coordination help the success of work implementation or organization achievement. Submission of clear information, proper communication, and proper job division inside a coordination will accelerate the achievement of organizational goals[4].

Based on thedata elucidated above, it shows that Sidoarjo has high case of traffic accidents with 1,436 cases in 2017. Besides, Sidoarjo had been in the top three districts/cities in East Java with the highest number of traffic accidents over the past five years.[3]. Based on the Traffic Accident Unit of Sidoarjo Police Resort (*Unit Kecelakaan Lalu Lintas Polisi Resor Sidoarjo*), the highest risk of motorcycle accidents involving students in Sidoarjo from January to September 2018 occurred in a Krian subdistrict. Based on the background explicated previously, this study aimsto analyze the coordination between police, schools and health centers in reducing the risk of motorcycle accidents in Krian Subdistrict.

#### 2. Material and methods

## 2.1 Research design, population, and sample

2.2 This research is descriptive research with cross-sectional research design. The psrticipants of the study selected based on purposive sampling method. There were 14 officers varied from Krian Police Department at Traffic Unit (*Satlantas*), Community and Society DevelopmentUnit (*Binmas*), , School Health Unit (*Unit Kesehatan Sekolah*) officers at SMAN 1 Krian, and the doctors at Krian community health center. The selected institutions correlate with the coordination to reduce motorcycle accidents in Krian. *Data Collection Instrument* 

The primary data collected through questionnaire regarding to the coordination to reduce motorcycle accidents in Krian. The questionnaire were handed out to selected staffs as sample. *Data Analysis Technique*. The researchers analyzed the datausing descriptive (frequency and percentage distribution tables). The stages of this research include preparing questionnaires, calculating samples, conducting surveys, verifying data, entering data, and making reports

### 3. Result

The coordination implementation between institutions to reduce the risk of motorcycle accidents in Krian could be identified through the aspect of the needs for coordination, officers' compliance in carrying out instructions, compliance in conducting communication and the barriers in carrying out coordination as described in Table 3.1 below.

**Table 3.1** Coordination Implementation between Police Agency, School and Health Center to Reduce the Risk of Motorcycle Accidents in Krian in January 2018

Coordination Implementation	Implementation level							Total		
Aspects	Always		Often		Sometimes		Never			
	N	%	N	%	N	%	N	%	N	%
Need for coordination	9	64,3	2	14,3	3	21,4	0	0,0	14	100,0
Officers' compliance in carrying out leadership instructions	6	42,9	5	35,7	3	21,4	0	0,0	14	100,0
Officers' compliance in conducting informal Communication	7	50,0	6	42,9	1	7,1	0	0,0	14	100,0
Coordiation's barriers	0	0,0	0	0,0	6	42,9	8	57,7	14	100,0

The table displayed 64.3% of respondents answered that they always needed coordination to carry out tasks related to the effort to reduce the risk of motorcycle accidents in Krian with other agencies14.3% of respondents answered that they often needed coordination with other agencies and 21.4% of respondents answered that sometimes they needed a coordination in carrying out their duties. However, none of the respondents answered that they never needed coordination in carrying out their duties. Moreover, as depicted in the table, 42,9% of the respondents always obeyed their leader's instructions to execute the

tasks in order to reduce the risk of motorcycle accidents in Krian , while 35.7% of respondents answered that they were often obedient and 21.4% of respondents answered that sometimes they were obedient in carrying out instructions.

Regarding to the compliance level of officers in conducting informal communication related to medical services to reduce the risk of motorcycle accidents in Krian, there were as many as 50,0% of respondents answered always, 42.9% of respondents answered frequently and 7.1% of respondents answered sometimes. In carrying out the coordination, 42.9% respondents answered that sometimes they faced some obstacles and 57.1% of respondents answered that they had never experienced obstacles when coordinating with other agencies during the coordination. The form of the obstacles in coordination is explained in the following Table 3.2:

**Table 3.2** The Form of the Obstacles and Their Causes Related to the Coordination Implementation to Reduce the Risk of Motorcycle Accidents in Krian in December 2018

Form of the Obstacles	Cause of the Obstacles			
Other institutionsdid not know the role of t	heThe role of the Health Center in traffic accidents			
Health Center in traffic accidents prevention	prevention.			
	Lack of communication regardingthe prevention of			
	traffic accidents from the Health Center to reduce			
	the risk of traffic accidents.			
The community health center has not done to	heIt has not been a priority for the Health Center			
preventive action optimally as an effort to preventThe Health Center was stuck on such activities to				
traffic accidents	overcome the health problems and disease			
	prevention in their working area. This problem			
	make the preventive action fora disaster or			
	accident has not been a priority.			
Lack of coordination between Police a	ndThe Police Agency did not know the role of			
community helath center to reduce the risk of community health centerinreducing the risk of				
accidents, so they are unable to provide anyaccidents.				
solutions regarding preventive elaborate the actionThe community health centerdoes not provides				
to High Schools in Krian	program to reduce the risk of accidents.			
	No optimal effort from school to give punishment			
	to the students who disobeysthe traffic rules.			

## 4. Discussion

The presence of a dependent situation caused by planned actions must be carried out through coordination. This coordination make it run more effectively and efficiently [5]. This opinion is in line withthe result of this study that 64.3% of respondents claimed they always need coordination to carry out tasks to reduce the risk of motorcycle accidents in Krian.

As many as 42.9% of respondents always obeytheir leader's instructions. Compliance in carrying out the leader's instructions showed that the agency has not yet fully committed to the work. Commitment is needed as one of the requirements for somebody to be part of the organization, including the selection criteria. Commitment to obedience also means that individuals feel they have a sense of belonging to their organization, and the spirit of the corps is a condition for coordination so that it can be carried out easily 4].

Informal communication is one of methods or techniques in coordination among agencies, [6]. As many as 50% of officers often carried out informal communication. This was a very good thing sinceinformal communication is important in implementing coordination to create good relationships and the coordination can run optimally. So far there have been no significant obstacles in communication between police, school and the community health center because each agency were able to appreciate and respect each other duties and performances.

Obstacle occured in the coordination was the ignorance of other agencies. So far, the lack information regarding community health center preventive actions for community, created misscommunication among other related institutions. [7]. In accordance with Act No.22 2009 concerning the Traffic and Transportation [8], Article 203 mandates the preparation of RUNK (*Rencana Umum Nasional* 

*Keselamatan*). The National Road Safety General Plan (RUNK: *Rencana Umum Nasional Keselamatan*) which is a long-term program of Ministry of Health (25 years), which needs to improve promotive and preventive aspects through an activity about healthy behavior on the road for students, family welfare empowermentand other elements of society, which can also coordinate together with the police agencies.

The community health center has not prioritized the problem of traffic accidents for students as one of the programs that must be handled, although Krian was a subdistrict who contributes the highest rate of motorcycle accidents in Sidoarjo in 2018. This caused the Health Center not maximized yet in preventing accident. There was no specific communication regarding the effort to reduce the risk of motorcycle accidents in Krian with related agencies such as Police and Schools [9]. The happen lack of maximum coordination between institutions related with other agencies that have not known the role of the Health Center. They should know the effort to reduce the risk of motorcycle accidents in Krian. Quality control of service is the most important part in health service [10].

#### 5. Conclusion

The coordination of the police, school and community health center to reduce the risk of motorcycle accidents in Krian in terms of 4 aspects of coordination is generally good. It can be seen from the percentage of the need for coordination, compliance in carrying out instructions, informal communication and obstacles in doing accordination. The obstacles in coordination occurred due to the lack of the understanding about the role of each agency especially the role of the community health center to reduce the risk of motorcycle accidents in Krian.

#### References

- [1] WHO. Road Traffic Injuries. Spanyol: WHO. Tersedia di: https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries; 2016.
- [2] Korlantas Polri. Polantas dalam Angka 2013. Tersedia di: http://korlantas.polri.go.id/statistik-2/ [8 Mei 2018] Korlantas Polri, 2017. Statistik Kecelakaan Lalu Lintas (online). Tersedia di: http://korlantas.polri.go.id/statistik-3/; 2014.
- [3] National Traffic Corps of Indonesia. 2013 Traffic Police in Numbers. Available in: http://korlantas.polri.go.id/statistik-2/ [May 8, 2018] National Traffic Corps of Indonesia, 2017. Statistics of Traffic Accidents (online). Available in: http://korlantas.polri.go.id/statistik-3/; 2014.
- [4] Gittel, J.H. Relational coordination: Guidelines for theory, measurement and analysis. Massachusetts: Brendeis University; 2010.
- [5] Handoko, 2003. Manajemen. Edisi Kedua. Yogyakarta: BPFE
- [6] Wijono, Satrio. Manajemen Konflik Organisasi. Jakarta: PT. Raja Grafindo Persada; 2009. Wijono, Satrio. Organizational Conflict Management. Jakarta: PT. Raja Grafindo Persada; 2009.
- [7] Depkes RI. Pedoman Jiwa Remaja: Pegangan bagi Dokter Puskesmas. Jakarta: Depkes dan Depsos RI Dirjen Kesmas Depkes; 2001.
- [8] Undang-Undang Nomor 22 Tahun 2009 tentang Lalu Lintas dan Angkutan Jalan *Act No. 22 2009 about Traffic and Public Transportation.*
- [9] Direktorat Pengendalian Penyakit Tidak Menular Kemenkes RI. Pedoman Pengendalian Faktor Risiko Kecelakaan dan Cedera (Seri Kecelakaan Lalu Lintas). Jakarta: Kemenkes RI; 2008
- [10] Khorida P., Hadidah I.S., Damayanti N.A. 2019. Community satisfaction index as an evaluation of health services quality. Indian Journal of Public Health Research and Development. 10(2): 14-18