

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

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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 collected through questionnaires and distributed to 14 officers in the Krian police agency, , high school, and Krian community health center. The respondents selected by 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 accidents become the leading cause of the Global Burden Disease (GBD). In 2010, 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

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

Coordination plays an 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 helps 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 the data elucidated above, it shows that Sidoarjo has a 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 aims to 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 participants 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 Development Unit (*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 data using 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 Aspects	Implementation level								Total	
	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
Coordination'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 agencies 14.3% 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 institutions did not know the role of the Health Center in traffic accidents prevention	The role of the Health Center in traffic accidents prevention. Lack of communication regarding the prevention of traffic accidents from the Health Center to reduce the risk of traffic accidents.
The community health center has not done the preventive action optimally as an effort to prevent traffic accidents	It has not been a priority for the Health Center The Health Center was stuck on such activities to overcome the health problems and disease prevention in their working area. This problem make the preventive action for a disaster or accident has not been a priority.
Lack of coordination between Police and community health center to reduce the risk of accidents, so they are unable to provide solutions regarding preventive action to High Schools in Krian	The Police Agency did not know the role of community health center in reducing the risk of accidents. The community health center does not provide program to reduce the risk of accidents. No optimal effort from school to give punishment to the students who disobey the 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 with the 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 obey their 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 since informal 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 occurred in the coordination was the ignorance of other agencies. So far, the lack information regarding community health center preventive actions for community, created miscommunication 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 empowerment and 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 acoordination. The obstacles in coordination occurred due to the lack of the understanding about the role of each agency especially the role of the communtiy health center to reduce the risk of motorcycle accidents in Krian.

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