



## Improving Knowledge of Online Motorcycle Taxi Drivers (*Ojol*) About Emergency Management of Fractures with Splints on the Road

Sahuri Teguh Kurniawan<sup>1</sup>, Saelan<sup>1</sup>, Galih Setia Adi<sup>1</sup>

<sup>1</sup> Universitas Kusuma Husada, Surakarta, Central Java, Indonesia

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### CORRESPONDENCE

E-mail: [s\\_sahuri@yahoo.com](mailto:s_sahuri@yahoo.com)

### A B S T R A C T

The incidence of fractures is the highest prevalence in the world. Fractures by accidents require serious management to prevent serious injuries. Improper first treatment of fracture victims can lead to death and disability. The causes of fractures in Indonesia include traffic accidents. The number of motorized vehicles in Indonesia is increasing 119.560 cases every year which caused new problems, including security, safety, and traffic congestion. Online motorcycle taxis are an alternative public transportation because they can reach places that are not passed by other public transportation. Online motorcycle taxis riders are people who are often on the road and often see even as victims of broken bones from traffic accidents, so there is a need for counseling and handling emergency conditions for motorcycle taxi drivers on the road. This community service activity aimed to increase the *ojol* drivers' knowledge and ability in dealing with emergency fractures on the road using discussion methods. The activity was carried out on Thursday, July 16, 2020, carried out face-to-face in the Sukoharjo Regency pavilion, followed by a number of 20 participants. The result of this activity found an increase in the knowledge of *ojol* drivers by 40% with posttest results of 80% continued with splint dressing. The results of these activities were followed up by coordination with Gojek for greater community service.

## INTRODUCTION

The World Health Organization (WHO) noted that in 2005 more than 7 million people died from accidents and 2 million people suffered fractures. The extremity fractures incidence was the highest prevalence among fractures (46.2%) (Saputro, 2017). The national health survey found that fractures cases in 2008 were 27.7% and in 2009 increased to 54.5%. The incidence of fractures requires appropriate first treatment management to prevent serious injuries (Kumagai, 2013). Improper handling of fracture resulted in death and disability, high treatment costs, and decreased quality of life of victims (Kirono, 2016).

The causes of fractures in Indonesia include traffic accidents. Based on the Republic Indonesia Coordinating Ministry for Transport (2016) the number of motorized vehicles in Indonesia in 2013 was 104,211 million units, the number of motorcycles was 86,253 million units, equivalent to 82.27%. The number of market demands for additional motorcycles continues to increase. Kirono (2016) stated the addition of the motorcycles number per year increased by 14% or an increase of around 12 million motorcycles per year. This addition caused new problems like security, safety, traffic order (kamseltibcarlantas) and the second was the criminal acts potential with motorbikes as objects (Kirono,

2016). Based on Indonesian Police Traffic Corps (Korps Lalu Lintas Kepolisian RI /KORLANTAS), the motorcycle traffic accidents incidence increased by 64%. In 2013 the incidence of traffic accidents was 119,560 cases with 12,171 deaths, 13,052 serious injuries, fractures and its kind 57,289 minor injuries, with an average of two people dying per day due to accidents.

Online motorcycle taxis (*Ojol*) is one of the motorcycle taxis that can be ordered using internet technology. Online motorcycle taxis are an alternative transportation for some people because they can reach places that are not passed by public transportation. The existence of *ojol* is advantageous for the community in overcoming obstacles of public transportation availability, but de jure the existence of *ojol* was considered to cause problems for traditional motorcycle taxis drivers. It also increases the number of vehicles on the road which means that there was a risk of traffic accidents as well increased (Annor, 2016). It is known that the number of *ojol* drivers in Indonesia reaches four million drivers.

*Ojol* is increasingly in demand because of the advancement of time and technology. *Ojol* users utilizing the mobile phone application to call the driver through the application and GPS assistance. *Ojol* not only delivering people but also goods for example, customer buy food and then *ojol* deliver it (gofood). This makes people like and use the application a lot to meet their daily needs. Thus, it is common to find online motorcycle taxi drivers on the road busy going back and forth to help community activities through increasingly developing technology.

The number of *ojol* service users impacted on increasing the number of motorcycle vehicles on the road which can lead to road traffic accidents. *Ojol* drivers often on the road and witnessing or even as a traffic accidents victim. This has encouraged community service activities to provide health education and training for *ojol* drivers on the management of fractures on the road.

## **METHOD**

The implementation of community service activities regarding education for online motorcycle taxi drivers about the fractures management has been carried out properly on Thursday, July 16, 2020, at the Sukoharjo Regency pavilion. From these activities, online motorcycle taxi drivers understand the definition, the causes, complications and management of fracture, and the practice of immobilizing fractures with splints.

This community service activity was attended by 20 online motorcycle taxi drivers consisting of online motorcycle taxi administrators, and the drivers. The activity started at 09.00 WIB. In this activity, the opening was started by a moderator from a member of the service, namely Galih Setia Adi. During the opening, the objectives and purposes of the activity were explained. The definition of fractures, causes of fractures, complications of fractures, fracture management, practice of immobilizing fractures with splints using the method:

a. Lecture

This method used as an introduction to provide material about fractures. The lecture method was the application and verbal narration by the speaker to the target by using additional power point tools (Nursalam, 2012).

b. Discussion

This method used both at the time of the counseling and at the end of the counseling which allows the audience to express things that have not been understood and can be conveyed directly (Syaiful, 2008).

c. Practice

Practice is the application of the material that has been obtained in the previous meeting. In this community service activity, they practiced by simulating splint dressings on fractured victims.

## RESULT AND DISCUSSION

The material presentation about the fracture definition, the causes of fractures, fractures complications, fracture management, the immobilizing fractures with splints practice was delivered by the head of the service, namely Sahuri Teguh Kurniawan. Before the material was delivered, a subjective pretest was conducted to assess the level of knowledge through questions and answers about the incidence of bone fractures that often occur on the road. The pre-test result found that almost all participants had heard and understood about fractures, but did not know about what actually happened in the condition of patients with fractures. Most of the participants only knew that a fracture was a broken bone, but could not explain the definition of a fracture and some of the causes of a fracture.

After the pretest assessment, the presenter continued by delivering material on the meaning of fractures, the causes of fractures, complications of fractures, fracture management, the practice of immobilizing fractures with splints. Then a discussion and question and answer session with online motorcycle taxi drivers was conducted and guided by a moderator.

During the questions and answer session, many participants asked about what happens to people with broken bones because it was a new material they have received. One of the participant was Mr. Dony Sugiyarto who said that when an accident occurred, he helped the victim by lifted to the side without knowing how to behave. Mr. Dony did it because did not know what to do. He said the help that could be given was by leaving the victim and if the condition was severe, he immediately ask for help by calling an ambulance or hospital. Mr Dony also explained that he immediately removed the victim even if the victim having a broken bone. Community service activities in stage 1 in the form of health education were carried out uneventfully. After delivering the material, question and answer session, and continued to practice/simulate how to do bandaging and splinting accompanied by members of service consisting of

lecturers and students. The evaluation of dressing and splinting demonstration was conducted by questions and answers, and participants were asked to practice independently but supervised by team. The post test results showed that there was an increase in participants' knowledge about fractures, the fractures management was 80% and participants were also able to do simple dressings and splints.

The incidence of fractures from year to year continues to increase. Data in 2018 the incidence of fractures to 54.5%, the incidence of fractures requires a serious first treatment action to prevent unwanted things from happening (Kumagai, 2013). Improper handling of fracture victims will result in death and disability, high treatment costs and decreased quality of life of patients (Apfelbaum, 2003).

The fractures incidence in Indonesia is being a contributor to traffic accidents. Based on the RI Coordinating Ministry for Transport (2016) the number of motorized vehicles in Indonesia in 2013 was 104,211 million units, the number of motorcycles was 86,253 million units, equivalent to 82.27%. The number of requests for motorcycles continues to increase. Kirono (2016) said the addition of the number of motorcycles per year increased by 14% or an increase of around 12 million motorcycles per year. This addition certainly caused new problems. The first was about security, safety, traffic order (kamseltibcarlantas) and the second was the potential for criminal acts with motorbikes as objects (Kirono, 2016).

The increasing number of motorcycles caused the incline of the motorcycle traffic accidents incidence by 64%. In 2013 the incidence of traffic accidents was 119,560 cases with 12,171 deaths, 13,052 serious injuries, fractures and the like, 57,289 minor injuries, with an average of two people dying per day due to accidents.

One of the contributors to the traffic accidents is online motorcycle taxi drivers. Online motorcycle taxis can be ordered using internet technology, and are an alternative transportation for some people because they can reach places that are not passed by public transportation. The de facto existence of *ojol* is very helpful for the community in solving obstacles to the availability of public transportation as an alternative transportation, but de jure the existence of *ojol* was considered to cause problems for traditional motorcycle taxi drivers. It also increases the number of vehicles on the road which means that there was a risk of traffic accident increased (Annor, 2016). It is known that the number of *ojol* drivers in Indonesia reaches four million drivers.

*Ojol* is increasingly in demand because of the time and technology advancement. *Ojol* users utilizing the mobile phone application to call the driver through the application and GPS assistance. *Ojol* not only delivering people but also goods for example, customer buy food and then *ojol* deliver it (gofood). This makes people like and use the application a lot to meet their daily needs. Thus, it is common to find online motorcycle taxi drivers on the road busy going back and forth to help community activities through increasingly developing technology.

## CONCLUSION

There was an increase in public knowledge *Ojol* driver's skill which could be seen by evaluating the action of bandaging and splinting. A questions and answers were conducted and participants were asked to practice independently. The post test results found that there was an increase in participants' knowledge about bone fractures, fracture management of 80% and participants can also perform simple dressings and full stop splinting.

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