

**SOCIALIZATION OF THE IMPORTANCE OF BRAKE INSPECTION ON
VEHICLES BEFORE CARRYING OUT THE EID HOMECOMING AT THE
PORIS PLAWAD TERMINAL**

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ABSTRACT

Lebaran homecoming is a moment that involves high mobility of motorized vehicles, so driving safety becomes crucial. The brake system as the main component of safety must be in optimal condition to prevent accidents. However, public awareness of the importance of brake inspection before a long trip is still low. This study aims to improve public understanding of the importance of brake system inspection through educational socialization activities. The methods used are interactive counseling, brake inspection simulation, and evaluation through pre-test and post-test. The results of the activity showed a significant increase in participants' understanding of the function and method of checking vehicle brakes. Thus, this socialization is effective in increasing awareness of driving safety and is expected to reduce the risk of accidents during Lebaran homecoming.

Keywords: brake inspection; community service; driving safety; eid homecoming; socialization

INTRODUCTION

Community Service (PKM) is a university initiative that focuses on conveying and applying knowledge gained in an academic environment to the wider community (Isnain et al., 2022). According to (Haryono et al., 2024) The aim of this activity is to provide solutions to problems in society through the application of science, technology and art, as well as to improve the welfare, independence and capacity of society in a sustainable manner. Eid homecoming is an annual tradition of Indonesian people that involves the movement of millions of vehicles to their hometowns. Eid homecoming is a routine habit every year in Indonesia, where there is a large movement of people returning to their hometowns to celebrate Eid al-Fitr with relatives (Guspianto et al., 2021). This activity causes a very significant spike in traffic volume, potentially increasing the number of accidents on the highway. Traffic accidents are one of the main problems faced by many countries, including Indonesia (Fitriah et al., 2024). Traffic accidents are generally caused by various factors, including environmental conditions, driver behavior, vehicle characteristics, and traffic characteristics (Sumantri et al., 2017). One important factor that affects driving safety during homecoming is the technical condition of the vehicle, especially the brake system. The brake system functions to slow down or stop the speed of the vehicle safely. The brake system plays a vital role in reducing and stopping the speed of the vehicle. Its function is very crucial because it is the main safety component that ensures a safe driving experience for the driver (Hafizh et al., 2022). If the brakes are problematic or do not work optimally, the risk of accidents becomes very high, especially when crossing busy roads, going downhill, or in emergency situations. (Halimatus Sa'diyah, Mariadi Kaharmen and Shofiah, 2020).

Brake inspection is the process of checking the condition of the braking system, including

the thickness of the brake pads, brake fluid leaks, the condition of the discs or drums, and general braking performance.(Ummah, 2019). This inspection is important to do before going on a long trip to ensure that all components of the brake system are working properly. Unfortunately, public awareness of the importance of brake inspections before going home is still relatively low. Based on data from the Indonesian Police Traffic Corps in 2023(Alhdapassa, 2023), traffic accidents during the homecoming flow are often caused by vehicle system failures, including brakes that are not fit for use(Hebrian and Hanny, 2024). The Autotech Journal of Muhammadiyah University of Purworejo explains the importance of checking brake pads, brake fluid, and disc run out periodically to maintain braking performance and prevent brake failure while driving.(Julianto, Abizar and Vernando, 2023).

Various previous community service activities have proven that technical education for the community can increase awareness and basic skills in conducting vehicle inspections independently. For example, activities carried out by Yulianto and team (2021) showed that short training on vehicle inspections succeeded in increasing participants' understanding by up to 78% in terms of vehicle safety. Based on these problems, this socialization activity was carried out to provide understanding and simple training to the community regarding the importance of brake inspections before carrying out homecoming. With this activity, it is hoped that the community will become more concerned about the condition of their vehicles and be able to identify potential brake damage independently as a preventive measure for road safety. The results of the study found that the failure of the braking process was caused by insufficient air pressure due to lack of maintenance and routine checks on the components of the vehicle's brake system.(Rizki Fitriani, 2021).

METHOD

This community service activity uses a participatory educational approach with the aim of increasing public awareness of the importance of checking the brake system before going on a homecoming trip.(Sumartan, 2023). The stages begin with the preparation of socialization materials, such as posters, simple brake inspection modules, and the preparation of pre-test and post-test questionnaires. The location of the activity is chosen in a strategic area that is frequently visited by travelers, such as UPUBKB, general workshops, and terminals.

The implementation is carried out through interactive lectures, brake inspection simulations, and open discussions. Participants are given an understanding of the function and characteristics of brake system damage and are invited to practice simple inspections. The effectiveness of the activity is measured through the analysis of pre-test and post-test results to see the increase in participant understanding. This activity is also fully documented in the form of photos, videos, and reports as evaluation materials and final reporting.

Preparation

In the implementation of the Community Service Program (PKM), the process begins with group formation, preparation, implementation of activities, and evaluation. At the group formation stage, each group consists of 4 students and 2 supervising lecturers who are part of the PKM team. The second stage is the preparation of activities which includes the preparation of proposals, preparation of necessary equipment, and review of the location of the PKM activity implementation.

Implementation Activities

This community service activity was carried out in the form of direct socialization to drivers of Lebaran buses at the Poris Plawad Terminal. This socialization was carried out in the form of counseling on the procedures for checking the air brake system on Lebaran buses before carrying out the trip for Lebaran homecoming activities. In addition, Lebaran bus drivers were also given a demonstration of the procedures for carrying out the inspection of the air brake system on their vehicles. During the activity, the drivers of Lebaran buses looked enthusiastic in receiving the information provided and immediately practiced the inspection procedures directly on the vehicles that would be used.

Evaluation

The evaluation was conducted by providing a closing statement to the bus driver regarding the importance of carrying out brake inspections on vehicles before carrying out the homecoming trip. According to the evaluation results (Wibowo and Haryanto, 2015) shows that carrying out brake inspections before departure can reduce the risk of brake failure and can reduce the number of traffic accidents caused by the failure of the air brake system on Eid buses.

RESULTS AND DISCUSSION

Community service activities with the theme Socialization of the Importance of Brake Inspections on Vehicles Before Carrying Out the Eid Homecoming has been implemented effectively at the Poris Plawad Terminal, Tangerang City. This activity is part of the Community Service Program (PKM) which involves collaboration between the Bali Land Transportation Polytechnic Internship Cadets and the Tangerang City Examiner Team. The implementation of this activity is in line with the spirit of community service which aims to improve understanding and practice of driving safety, especially ahead of the Lebaran homecoming period which is identical to the spike in traffic.

1. Program Success

This activity successfully attracted the attention and active participation of intercity/provincial bus drivers. The participants showed enthusiasm in following the socialization session and direct practice of brake inspection, especially the full air brake system. Important points in the inspection such as air pressure check, leak detection, and brake pedal response were conveyed well and easily understood. The success of this activity can also be seen from the two-way discussion between drivers and resource persons and the installation of brake inspection stickers as a reminder that was enthusiastically received by the participants. Many drivers gave positive feedback on this activity, and some of them suggested that similar activities be carried out routinely, especially before busy times such as national holidays. Furthermore, this activity not only creates temporary understanding, but also encourages the creation of new habits in independent vehicle inspections. Based on field observations, after the activity took place, there was an increase in the number of drivers who proactively checked the condition of the brakes before departure.

2. Supporting Factors

The success of this activity cannot be separated from various supporting factors. Full support from POLTRADA Bali and the Tangerang City Testing Team is the main foundation. In addition, the active involvement of Taruna Magang as technical implementers in the field also facilitated the implementation of the activity. The readiness of the activity location at the strategic and easily accessible Poris Plawad Terminal also

greatly supports the effectiveness of the implementation of the socialization. This terminal is a major transportation hub, so the selection of the location is very appropriate to reach a large number of drivers. Good coordination between parties is also a key element. The implementation team has carried out their respective roles professionally, starting from preparing socialization materials, arranging logistics, to documenting activities. Not only that, intensive communication between team members before and during the activity helps minimize errors and accelerate decision-making in the field.

3. Inhibiting Factors

During the activity, no significant obstacles were found. All stages of the activity can be carried out according to the planned agenda. This reflects the efficiency in planning and readiness of all parties involved in the implementation of the activity. However, it should be noted that there are potential obstacles that need to be anticipated in similar activities in the future, such as limited time for drivers who must leave immediately, or bad weather that can disrupt the course of field practice. Therefore, schedule flexibility and the provision of a more closed or shaded place can be considered in the next implementation to maintain participant comfort.

4. Evaluation and Impact of Activities

The evaluation of the activity was carried out directly through observation and interaction with participants. The results showed that most drivers re-understood the importance of checking the brake system before the trip. Participants also received educational stickers as a reminder. The direct impact of this activity was the increase in technical awareness of drivers regarding the importance of vehicle safety aspects, especially in dealing with traffic conditions during the Eid homecoming. Several drivers even said that they only learned how to detect air leaks in the brake system after participating in this socialization.

This activity also has a medium-term impact in the form of increased communication between test officers and drivers, thus creating a more open relationship in sharing information related to safety. In a broader context, this activity has the potential to encourage a change in a more responsible driving culture, starting from simple but vital technical matters such as brake checks.

Stages of Activity Implementation

1. Socialization activities on brake inspection procedures before driving.

The socialization activity was carried out at the Poris Plawad Terminal. In this activity, students explained how to inspect the brakes before driving, especially on buses that use full air brakes / air brakes. The importance of this implementation is to prevent accidents caused by air brakes.(Kulesza and Siemieniako, 2010), this implementation aims to open the driver's awareness in the importance of brake inspection before carrying out a trip especially buses carrying people. The socialization activity begins with the procedure for checking whether there is a leak in the brake system until the practice at the time of the explanation that has been delivered.



Picture 1. Dissemination of brake inspection procedures

2. Attaching brake inspection procedure stickers to buses

After the socialization, the students then attached stickers to the bus as a reminder to always check the vehicle's brakes before starting to drive. The stickers contain the same procedures as those explained during the socialization and contain the stages for brake inspection before carrying out the activity. They are attached to the right side of the driver and are easy to see.



Picture 2. Attaching brake inspection procedure stickers

3. Group photo

Group photos after the socialization activity are formal and symbolic documentation carried out by all students, committees, and speakers as the closing of the series of events. This activity aims to capture moments of togetherness and as a form of appreciation for the active participation of all parties involved. In addition, group photos are also evidence of the implementation of activities that can be used in accountability reports or publications of institutional documentation. Group photos reflect the success of the implementation of socialization.



Picture 3. Group photo

CONCLUSION

This socialization activity has had a positive impact in increasing public understanding of the importance of conducting brake system inspections before carrying out homecoming trips. Through an interactive educational approach, participants gained basic knowledge about the function, components, and simple ways to check the condition of vehicle brakes. The evaluation results showed an increase in participant understanding after participating in this activity, which reflects the effectiveness of the material delivery method and the importance of direct technical counseling to the community. With increasing awareness of the importance of driving safety, especially in terms of brake checks, it is hoped that the public can be more proactive in ensuring that their vehicles are roadworthy before being used for long-distance travel. Activities like this need to be carried out continuously, especially ahead of accident-prone times such as the homecoming flow, in order to support efforts to prevent traffic accidents and create a culture of road safety.

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