

IMPROVING UNDERSTANDING REGARDING DANGEROUS GOODS AND BLIND SPOT AT SMAN 7 DENPASAR

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ABSTRACT

It is important to know and understand about dangerous goods and the procedures for transporting dangerous goods, especially for the younger generation can help the transport of dangerous goods reduce the number of accidents in the transportation of goods. Reducing the number of freight transport accidents is one way to implement safety and security when driving. Many young people do not understand safety and security in driving, and on this basis the Bali Land Transportation Polytechnic provides an understanding of the blind spots for dangerous goods transportation. This activity uses socialization/counseling methods to participants regarding the load of dangerous goods on the road and blind spots. The target of the Community Service Program (PKM) is aimed at students of SMAN 7 Denpasar, this is closely related to the role of youth/students and driving safety when dealing with dangerous goods transportation. It is hoped that this socialization will provide an understanding of dangerous goods in order to realize the role of the younger generation in the safety and security of the transportation of dangerous goods. After conducting socialization regarding dangerous goods, participants were able to understand the explanation given and answer the quiz questions properly and correctly.

Keywords: blind spots; students; transport of dangerous goods

INTRODUCTION

Dangerous goods are objects or substances that pose a risk to health, safety, property or the environment. They need to be packaged properly, handled with care, and shipped with the necessary expertise to ensure they arrive safely at their destination. The need for special attention and handling both when managing and transporting shows that this type of item is included in the special goods category. Mistakes in handling dangerous goods will have an impact on surrounding objects. This especially occurs in the transportation process, where this condition is prone to causing pressure or movement in the cargo of dangerous goods. For this reason, it is necessary to pay attention to the types and procedures for transporting dangerous goods appropriately and according to procedures.

Based on statistical data in 2019, dangerous goods transport accidents accounted for 11.79%, which means 28,089 cases of the total goods transport accidents in Indonesia. These statistics show the need for special attention to dangerous goods and their transportation. Often accident cases are caused by 2 factors, namely internal and external factors, where internal factors include driver negligence and problems with goods transportation, while external factors include travel terrain, traffic and weather. The number of accidents caused by transportation of dangerous goods is not as high as accidents caused by other types of transportation, but the impact is very large, not only material loss but also loss of life. In this case, the factor that plays an important role is the Human Resources (HR) factor. Human resources are needed who understand and are trained regarding the types of dangerous goods, how to handle them, and how to transport them in accordance with the procedures stated in Minister of Transportation Regulation No. 16 of 2021 concerning procedures for handling and transporting dangerous goods.

Handling and transporting dangerous goods requires expert human resources. Apart from that, assistance from all parties is needed so that safety and security can be realized during the process of handling and transporting dangerous goods. For this reason, knowledge and understanding of dangerous goods and procedures for transporting dangerous goods are required (Hutabarat, 2019). Especially for the younger generation, understanding dangerous goods can help those who handle dangerous goods so that they can reduce the number of accidents. One form that the younger generation can implement apart from learning about dangerous goods is maintaining safety and security when driving. Because traffic factors are the cause of dangerous goods transport accidents, driving wisely and according to the rules can help minimize the number of accidents.

Teenagers, especially those who have entered high school, are the dominant two-wheeled vehicle users. Often they drive without fulfilling the requirements, for example, a driver's license, of course many people don't understand how to drive wisely. When dealing with dangerous goods transportation, ignorance about blind spots and dangerous goods loads can have fatal consequences, not only for oneself but also for the surrounding environment. On this basis, the Bali Land Transportation Polytechnic from the D-III Logistics Management Study Program conducted outreach to students at SMAN 7 Denpasar regarding dangerous goods, how to transport dangerous goods, and blind spots for transporting dangerous goods in order to provide students with an understanding of dangerous goods and procedures. how to maintain safety from the consequences of transporting dangerous goods.

Socialization activities for students focus on introducing various types of dangerous goods and how to drive to avoid blind spots when encountering dangerous goods on the road. This activity was carried out to increase the insight of students who felt they were less related to dangerous goods. This socialization activity provided different outputs such as perspective, mindset and handling of dangerous goods that students would later encounter. This socialization activity is carried out on the basis of learning material which is intended so that students better understand and know about dangerous goods on the road.

Dangerous goods are goods that have the potential to harm health, safety, property and the environment. Knowledge regarding dangerous goods and how to avoid blind spots for transporting dangerous goods when driving is important for students, especially when driving on the highway, this is because in accordance with facts on the ground that the number of accidents in Bali is dominated by student age drivers who can This means that students still lack basic understanding of driving, especially driving with vehicles loaded with dangerous goods on the road. This socialization activity emphasizes the basic theory of dangerous goods and their handling theory, participants consisting of students and teachers easily accept the material presented.

METHOD

This Community Service activity was carried out by providing material presentations to students of SMAN 7 Denpasar. The method used is counseling/socialization through presentation of material and holding two-way communication regarding the loading of dangerous goods on the highway and blind spots. The socialization activity method is a learning process that exists in a social environment to instill values and goals that will be achieved by activity participants (Fajari et al., 2022). In this case, D-III Logistics Management cadets presented material related to the loading of dangerous goods on the

highway and blind spots. Furthermore, two-way communication is communication carried out between the communicator and the communicant who provide feedback to each other on the messages received (Prastiwi and Reny Yuniasanti, 2014). At this stage, D-III Logistics Management cadets carry out two-way communication with the participants by providing the opportunity to ask questions and providing the opportunity to answer questions with prizes to increase participant enthusiasm.

RESULTS AND DISCUSSION

Implementation of Community Service (PkM) activities was carried out by Bali Land Transportation Polytechnic cadets at SMAN 7 Denpasar which is located on Jalan Cambodia No 9, Dangin Puri Kangin, Denpasar on Tuesday, July 25 2023 at 08.00-12.30 WITA. Implementation of PkM activities is carried out through 3 stages, namely preparation, implementation and evaluation. The preparation stage for community service begins with coordinating with lecturers and the SMAN 7 Denpasar, preparing equipment and materials to be presented, carrying out activity rehearsals, and installing decorations at the activity location. Next, at the implementation stage, there was a presentation of material related to the loading of dangerous goods on highways and blind spots to students at SMAN 7 Denpasar as well as conducting a quiz activity for the participants. The final stage is carrying out an evaluation by compiling activity reports in the form of accountability reports and scientific journals.

The PkM implementation was opened by the Head of SMAN 7 Denpasar and the Head of the P3M Center of the Bali Land Transportation Polytechnic. This PkM activity was attended by class 12 students of SMAN 7 Denpasar. The implementation of this PkM is carried out by providing material exposure related to the loading of dangerous goods on highways and blind spots. This aims to provide insight to students so that they always have knowledge in handling dangerous goods which are included in dangerous goods, and have awareness of transport containing dangerous goods on the highway, and are able to apply safety when driving by avoiding blind spot areas on vehicles that are in use. loading excess goods (over dimension over loading) and transportation of dangerous goods. The selection of grade 12 students as PkM participants is certainly appropriate, because at that level they tend to be active in driving on the highway and are quite close to goods that are considered dangerous goods in everyday life. After presenting the material interactively, a quiz session with prizes was held which aimed to ensure that the information presented was well received by PkM participants. During the activity, the PkM team actively involved participants in delivering material, asking questions, providing opportunities to ask questions, and relating the material presented to the conditions in their lives. Through this, it is hoped that PkM participants can understand the material well and correctly and can apply it in everyday life.

Program Success

This Community Service activity is able to provide increased understanding to students of SMAN 7 Denpasar regarding the types and handling of dangerous goods in everyday life as well as being able to know the procedures for implementing safe driving to avoid blind spots from dangerous goods transportation and over dimension over loading (ODOL) vehicles.

Supporting factors

The supporting factor for this PkM activity is the support and obtaining permission from SMAN 7 Denpasar. This can be seen from the opening of this activity directly by the head of

SMAN 7 Denpasar. Apart from that, the enthusiasm of the students of SMAN 7 Denpasar as activity participants is a concrete manifestation of the implementation of PkM activities smoothly and lively. The implementation of activities is also inseparable from the support of management, lecturers, teaching staff, and cadets of the Bali Land Transportation Polytechnic, especially the Logistics Management Diploma III Study Program who are involved.

Obstacle factor

The obstacles faced in implementing PkM are related to time constraints, so that activities of a longer duration cannot be held. However, this is not a significant obstacle, considering that during the PkM activities, the PkM target objects feel open and comfortable when approached using two-way socialization and communication methods in providing material. The level of enthusiastic participation of students at SMAN 7 Denpasar was very high in following the presentation of the material, where the participants really appreciated and enthusiastically received some of the material presented by the PkM team who had provided explanations regarding the material presented.

Stages of Work Program Implementation

1. Identify the Problem

Problem identification is part of the research process which can be understood as an effort to define the problem and make the definition more measurable or measurable as a starting point for research, apart from that the existing problem is a discrepancy between what should happen and the facts in the field or what is happening in this case. namely how a driver understands and comprehends the load of dangerous goods on the road and blind spots in dangerous goods transportation. According to data from UPT Jasa Raharja, Bali Province, the number of accidents among students in Bali is still relatively high at 36.06 percent for students aged 11-26 years. Apart from that, students' understanding of how to drive when there is a load of dangerous goods and blind spots. There are still not enough spots for these vehicles on the road due to a lack of socialization about dangerous goods, so this is the basis for the PkM activities carried out at SMAN 7 Denpasar.

2. Needs Analysis

Needs analysis is an important part of conducting research, where needs analysis is carried out to obtain information about potential recipients of teaching materials or presentation materials. Based on the needs analysis, it is known that students still do not have insight or knowledge regarding how to handle dangerous goods on the road and how to avoid blind spots for dangerous goods transport. Seeing that there is still a lack of knowledge, there is a need for basic socialization regarding dangerous goods as a basis for handling when encountering a vehicle containing dangerous goods on the road. It is hoped that the outreach carried out to students will increase their insight into handling dangerous goods on the road.

3. Program preparation

The community service program is a program implemented to increase the knowledge and understanding of students, especially students at SMA Negeri 7 Denpasar, in handling dangerous goods on the road. In preparing the program of activities carried out there is a learning value which will change the perspective, mindset and way of handling students. Furthermore, it is related to measuring the success of learning based on changes in students regarding handling dangerous goods on the road. Therefore, the program must have goals or objectives and be structured systematically. The program will be given to

SMA Negeri 7 students on July 25 2023 starting from 08.00-12.30 WITA with a material exposure system related to the loading of dangerous goods on the road and followed by a quiz session. to measure the level of students' understanding of the material presented. This exposure was given directly to students and teachers at SMA Negeri 7 Denpasar.

4. Implementation of the Dangerous Goods Loading Socialization Program on Highways and Blind Spots

Implementation of the Dangerous Goods Load Socialization Program on Highways and Blind Spots consists of several stages, namely:

- a. Presentation Stage of Material "Cargo of Dangerous Goods on Highways and Blind Spots"



- b. The activity began with the opening of socialization which was held in the Hall SMA Negeri 7 Denpasar, attended by the Principal, teachers and students from SMA Negeri 7 Denpasar, as well as remarks from representatives of the Bali Land Transportation Polytechnic, represented by Mr. Aris Budi Sulisty, ST., MT. The Cadets continued with the activity by presenting material about the loading of dangerous goods on the road by the Diploma III Logistics Management Study Program.

- c. Stage of Implementing the Quiz to Students

The next activity after the presentation of material regarding the loading of dangerous goods was a quiz given to students in order to measure the level of understanding regarding the material that had been presented previously. In this activity, students who can answer the questions provided by the presenter will be appointed and come forward to answer and explain the answers to these questions. From this it can be seen that the students during the presentation activity can follow well and understand the material being discussed. delivered, and if the students succeed in answering correctly they will be given a goodie bag as a form of appreciation from the Bali Land Transportation Polytechnic.



CONCLUSION

Socialization activities related to the loading of dangerous goods and blind spots aim to improve the abilities of students at SMAN 7 Denpasar in understanding the types and handling of dangerous goods in everyday life and understanding how to implement safe driving to Avoid blind spots for dangerous goods transport and over dimension over loading (ODOL) vehicles. From the PkM activities that have been carried out at SMAN 7 Denpasar, conclusions can be drawn, namely, the results of the implementation of these PkM activities include: 1. Good coordination between the Bali Land Transportation Polytechnic PkM team and SMAN 7 Denpasar, so that the activities take place safely and smoothly. 2. Presentation of material related to the loading of dangerous goods and blind spots was carried out which was responded well by students at SMA Negeri 7 Denpasar. 3. Good absorption of the material by students at SMA Negeri 7 Denpasar, which is proven by their enthusiasm in answering the quiz given during the presentation of the material. In general, the PkM activities have been going well and are able to provide knowledge for the participants and are able to provide good knowledge for the PkM participants, and will continue at the implementation level in the preparation of activity accountability reports and scientific journals.

REFERENCE

- Fajari, L. E. W., Sa'diyah, H., Aini, S., & Dzakiroh, F. (2022). Sosialisasi Pentingnya Pendidikan Bagi Generasi Muda di Kelurahan Cikerai Kecamatan Cibeber Kota Cilegon. *I-Com: Indonesian Community Journal*, 2(2), 416–425. <https://doi.org/10.33379/icom.v2i2.1609>
- Hutabarat, E. S. (2019). Analisa Potensi Resiko Keselamatan Pengemudi Barang Bahan Berbahaya dan Beracun Berdasarkan Agreement for Transport of Dangerous Goods by Road (ADR). *Jurnal Penelitian Transportasi Darat*, 21(2), 10110. <https://doi.org/10.25104/jptd.v21i2.1330>
- Prastiwi dan Reny Yuniasanti. (2014). Hubungan Antara Model Komunikasi Dua Arah Antara Atasan Dan Bawahan Dengan Motivasi Kerja Pada Bintara Di Polresta Yogyakarta. *Jurnal Psikologi Integratif*, 2(2), 10.