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IMPROVING TRAFFIC SAFETY THROUGH A COMMUNITY PARTICIPATION APPROACH

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ABSTRACT

The rapid growth of transportation has become essential to mobility in modern times. Increased activity will go hand in hand with increased movement of people and goods. This will have an impact on increasing the potential for transportation accidents, especially road traffic and transportation accidents. Based on data from the Indonesian National Police, by 2022, around 1.35 million people will die due to road traffic accidents, or more than 3,712 people per day. Lack of knowledge about traffic safety is the main problem in this community service. This community service was held in collaboration with the Grobogan Regency Transportation Office. The method used in this activity is by using lectures, questions and answers, giving case examples and practicing emergency response in the event of an accident. Based on the results of the activity, there was an increase in the value of knowledge and understanding of traffic safety by 30%. This shows that the material provided during the implementation can be accepted and applied by the participants.

Keywords: accident; llaj; society; safety; traffic

INTRODUCTION

Transportation is essential for mobility in modern times. Increased activity will go hand in hand with increased movement of people and goods. This will also have an impact on increasing the potential for transportation accidents, especially road traffic and transportation (LLAJ) accidents. Based on data from the Indonesian National Police, by 2022, around 1.35 million people will die as a result of road traffic and transportation accidents, or more than 3,712 people per day. National data also recorded an increase in the incidence of accidents by 3.5% to 24.8% annually between 2018 and 2022, with the largest proportion of accidents occurring in productive age. In the case of accidents, the highest factor is the human factor. This is caused by the characteristics of the driver when driving a vehicle and the behavior of drivers who drive above the average speed. Road factors can be caused by factors such as the existence of several unfit roads such as many damaged or potholed roads and lack of signs (Andesa et al., 2022) (Zaini aryatama, 2022). Human negligence is the main factor causing traffic accidents in adolescents (Hamid et al., 2022). The factors that cause traffic accidents are closely related to the elements that make up traffic, namely road users, vehicles, roads, and the environment (Lestari & Khairat, 2021).

Driver risk behavior is part of the main factors of accidents from human factors that are significantly related to accident occurrence, driving under the influence of alcohol, smoking while driving, use of inappropriate vehicle lights, use of cellphones while driving, number of passengers exceeding capacity, violation of road markings, dangerous overtaking, use of inappropriate indicator lights, speed violations, violation of traffic signs and signals (Afif Mauludi et al., 2021). Risky driving behavior is influenced by a lack of understanding of road safety. Aggressive driving behavior is still the main cause of traffic accidents (Mohammad Nu'man & Ramdhani, 2020). Road safety is a national priority in ensuring that all aspects of road safety implementation are handled properly, grouping road safety aspects into 5 (five) pillars which are a simplification of the 14 sectors that require road safety handling. The five pillars are safety management, safe roads, safe vehicles, safe road user behavior, and post-

accident casualty management as outlined in the National General Plan for Traffic and Road Transport Safety (RUNK LLAJ).

Indonesia's road safety includes the formalization and standardization of the traffic accident handling process, a guarantee system for the settlement of losses resulting from traffic accidents, targeted safety education and deterrent law enforcement, the provision of sustainable funding to improve road safety, the granting of strict driving rights, the implementation of effective road safety institutions supported by accurate information systems, and the provision of road traffic facilities and infrastructure that meet safety standards (Government of Indonesia, 2011). Educational activities through community empowerment can increase safety knowledge by 41% (Oktopianto et al., 2021). This method is effective enough to be applied to similar activities such as the application of safe parking can increase the knowledge and understanding of participants by 65% (Oktopianto & Rukman, 2023).The fields that can be intervened in efforts to handle road transportation safety are engineering, education, enforcement, emergency preparedness and encouragement. From the five fields above, the Road Transportation Safety Polytechnic (PKTJ) as an educational institution collaborates with the Transportation Agency to empower traffic safety communities. This community service activity aims to increase knowledge and understanding of traffic safety as a safety handling effort to reduce the number of accidents in Indonesia.

METHOD

The traffic safety community empowerment activity was held for 2 days at the Grobogan Regency Transportation Office. Activities are carried out through the following stages:

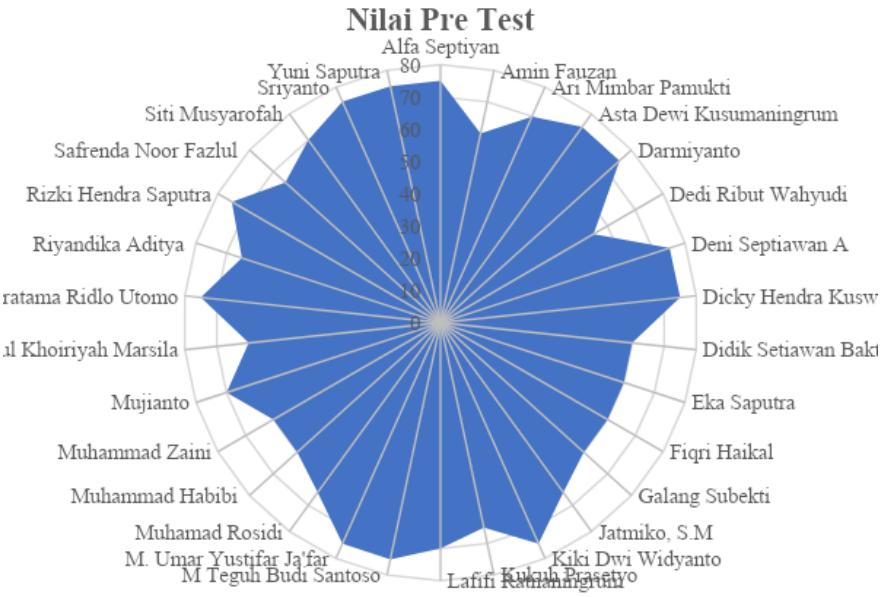
1. The team wrote to the Grobogan Regency Transportation Agency to carry out community service activities.
2. The Transportation Agency recorded 30 counseling participants as field officers and the general public in Grobogan Regency.
3. The team conducted a pre-test to participants by giving instruments in the form of questions about road transportation traffic regulations, driving procedures and emergency response at the beginning of the activity.
4. The team took the score of the pre-test results to measure the participants' initial knowledge of understanding road transportation traffic, driving procedures and emergency response on a daily basis.
5. The team conducted traffic safety counseling activities with material on LLAJ Regulations, pedestrian characteristics, driving procedures, procedures for using public transportation, level crossings and emergency response.
6. Counseling activities were carried out using lecture methods, question and answer, giving case examples.
7. The team conducted a post test to the participants by giving instruments in the form of questions about road transportation traffic regulations, driving procedures and emergency responses at the beginning of the activity.
8. The team took the post test scores to measure the participants' level of understanding of traffic safety at the end of the activity.
9. Analyzing data descriptively based on pre-test and post test to draw conclusions.

The implementation of this community service activity was carried out May 30, 2023 - May 31, 2023. The participants of this traffic safety community empowerment activity were 30

people who were field officers of the Transportation Agency and the general public of Grobogan Regency.

RESULTS AND DISCUSSION

The results of traffic safety community empowerment activities in Grobogan Regency can be seen through the pre-test and post-test scores of participants. The post test is an instrument to measure the level of understanding of participants about traffic safety on the highway. The pre-test instrument contains questions about road transportation traffic regulations, driving procedures and emergency response. The results of the pre-test participants obtained the highest score of 75, the lowest score of 55, and an average score of 68 as can be seen in Figure 1.



The material delivery activities were carried out by lecture, question and answer method, giving case examples. This activity was held for 2 days at the Grobogan Regency Transportation Office. Traffic safety community empowerment involves the academic community and cadets of the Road Transportation Safety Polytechnic in collaboration with the Grobogan Regency Transportation Agency. The activity of providing traffic safety community empowerment material can be seen in Figure 2.

Figure 2. Material Delivery Activity

The materials presented included LLAJ Regulations, pedestrian characteristics, driving procedures, procedures for using public transportation, level crossings and emergency response. The first material was LLAJ Regulations, delivered directly by Tri Wahyudi Joko Purnomo, S.R., M.M from the Grobogan Regency Transportation Office. Driving procedures and level crossings by Yogi Oktopianto ST., MT as a lecturer at the Road Transportation Safety Polytechnic with material on the causes of accidents, preparation before driving, driving procedures at crossings and safe driving. Pedestrian characteristics material by Dr. Rukman, S.H., M.M. lecturer of Road Transportation Safety Polytechnic. The practice of emergency response was delivered by Tri Wahyudi Joko Purnomo, S.R., M.M from the Grobogan Regency Transportation Agency with material on first aid in accidents, steps taken when helping accident victims, how to secure evidence, and fire fighting techniques. The material delivery activities can be seen in Figure 3.

Figure 3: Material Delivery Activity

The traffic safety community empowerment activity was very well organized, indicated by the great interest and enthusiasm of the participants at the time of registration and registration. In its implementation, several inhibiting factors due to the limited number of participant quotas made this activity unable to accommodate all field implementers in Grobogan Regency. Evaluation is carried out after the delivery of the material through a post test . The post test is the final evaluation of this community empowerment activity which has been carried out for 2 days. The purpose of the post test is to determine the success of the learning process and measure the participants' mastery of the competencies of the material presented by the resource person. In accordance with the subject matter, the participants' competency indicators are expected to be able to understand traffic safety on the highway. The post test questions given are the same as the pre-test questions to facilitate evaluation and measure the level of understanding of the participants. The results of the post test can be seen in Figure 4.

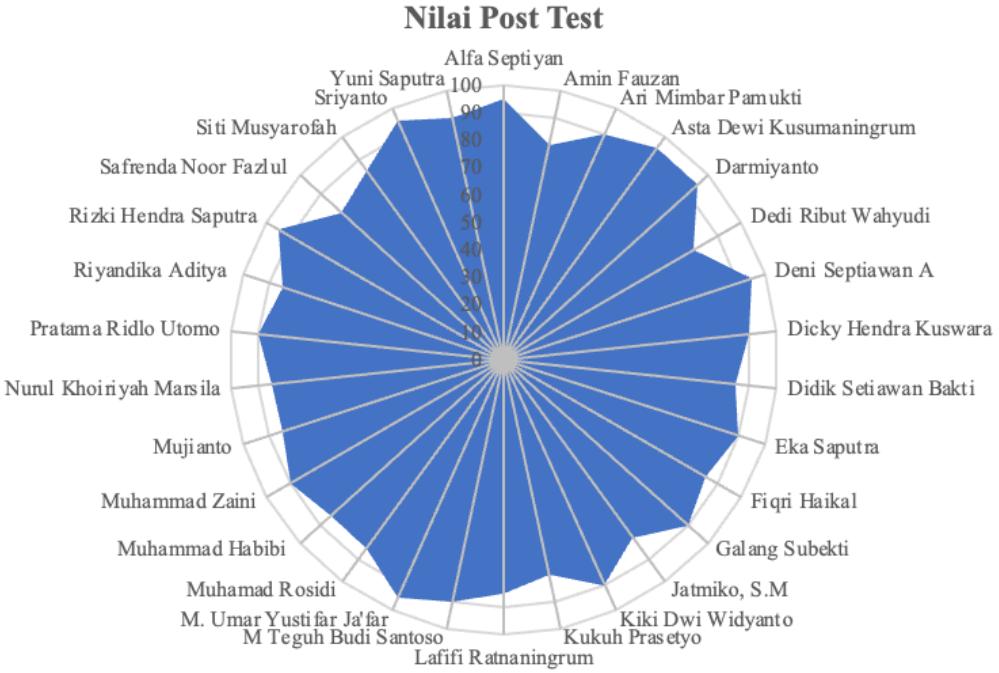


Figure 4. Post Test Diagram

From the post test results, the highest score was 95, the lowest score was 80, and the average score was 88. The comparison between pre-test and post-test scores as a result of traffic community empowerment activities in Grobogan Regency can be seen in Figure 5.

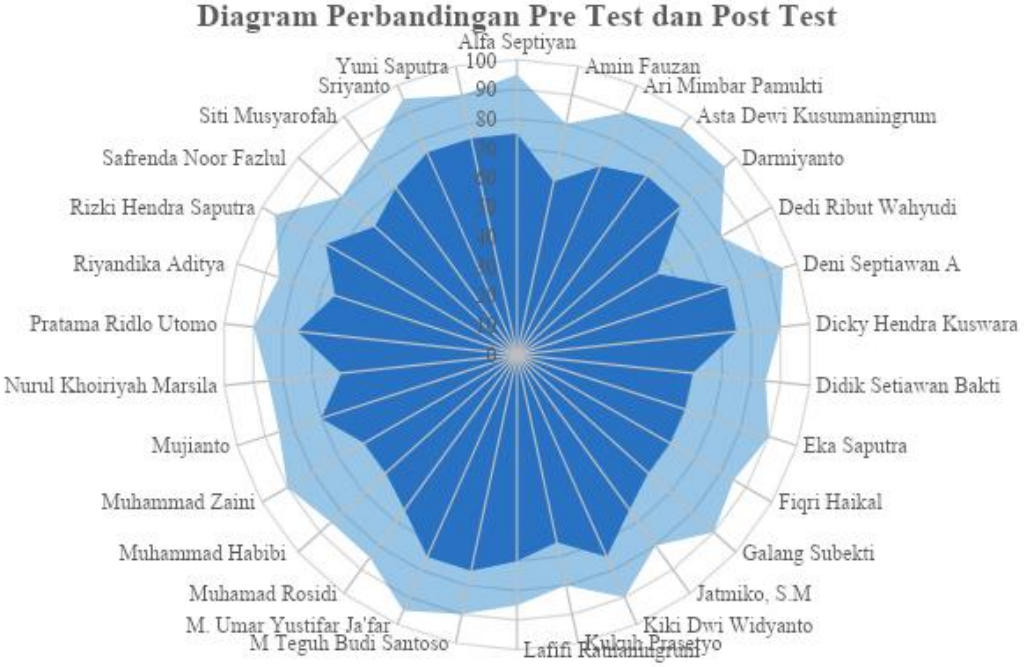


Figure 5. Comparison Diagram of Pre-Test and Post Test Scores

From the diagram of Figure 5. it can be seen that all participants experienced an increase in value. The significance between the pre-test and post-test values can be seen based on the post-test diagram outside the pre-test value, which means that the pre-test value is exceeded by all participants. If taken from the average value obtained during the pre test of 68 and the average post test value of 88.17, there was a 30% increase in value against the previous value.

This shows that the material provided in this community empowerment activity is well absorbed by the participants.

CONCLUSION

Through traffic safety community empowerment activities can increase knowledge to the community about the importance of road transportation safety in everyday life. Based on data analysis conducted through traffic safety community empowerment activities can increase the knowledge and understanding of participants by 30%. The enthusiasm of participants in Grobogan Regency is a determining factor in the success of this activity. As a long-term benefit, it can make drivers aware of traffic behavior and responsibility to improve safety and reduce the number of accidents. Furthermore, similar activities can be scaled up globally to the wider community.

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