

Level of Public Awareness of the Hazards in Marine Tourism Torosiaje Village, Pohuwato Regency, Gorontalo Province, Indonesia

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Abstract: This research is about the level of public awareness in the marine tourism village of Torosiaje, Pohuwato district, about the dangers of marine debris at the tourist site of Torosiaje Village, Pohuwato Regency, Gorontalo Province. This study aims to provide education/awareness to the people of Torosiaje Tourism Village, especially elementary and junior high school children in Torosiaje Tourism Village, Pohuwato Regency, about: (1) the dangers of waste (especially plastic), (2) how to keep the beach clean. This activity was carried out using lecture, discussion and question and answer methods using poster media. The results of this activity are: (1) Media for outreach activities in the form of posters about marine pollution and its effects on life have been made, (2) Results of observations, discussions and questions and answers, as well as tests of community attitudes, showed that through this outreach activity, students' knowledge about the dangers of marine debris increased. (3) Students' awareness of the dangers of marine debris increases.

Keywords: *level awareness, marine litter, healthy environment, tourist village*

Introduction

Today's environmental problems are widely discussed by people, because there have been symptoms and tendencies of environmental pollution caused by human actions. For example, deforestation that causes erosion, air pollution, pollution of water resources and rivers as a result of the disposal of industrial waste and household waste, as well as many other cases that have now become a common phenomenon. Many factors are the cause of the declining quality of the environment, including the low level of education and public knowledge about the environment, so that they are less responsive to be able to receive information that is useful for themselves.

In addition, people's living habits are always throwing garbage in the wrong place, it is difficult to change and the ignorance of the environment causes the environment to become dirty and polluted. Environmental pollution is generally caused by the community in the environment itself. As an example, namely the lack of good knowledge about the environment for students, can affect their behavior in maintaining environmental cleanliness, so that their actions have a negative impact on the environment. For example, garbage is piled up just like that, it can lead to mosquito nesting places and this is as a result of a lack of knowledge about the effects of the dangers of garbage and waste. Creating a clean and healthy environment is a shared responsibility, especially the leaders and the people around them. They have an important role in protecting the environment and creating a clean and healthy environmental culture. Based on the healthy paradigm, the vision of Healthy Indonesia 2010, where there are 3 pillars that need special attention, namely a healthy environment, healthy behavior and quality, fair and equitable health services. For healthy behavior, the concrete form is proactive behavior to maintain and improve health. prevent the risk of disease, protect themselves from the threat of disease and actively participate in health efforts. In realizing the vision of Healthy Indonesia 2010 a development mission has been set, namely to drive national development with a health perspective. Encouraging community independence to live healthy, maintain and improve quality, equitable and affordable health services, as well as maintain and improve the health of individuals, families and communities and their environment. To carry out the mission of health development, efforts are needed including how to maintain and maintain cleanliness in the school environment. School cleanliness is a shared obligation between teachers, students, employees, and all elements in it. However, what happens is that the cleanliness of the school is borne by the school guard. This is a bad example in the implementation of education, especially in schools. Efforts to manage the environment have become our collective duty and obligation. As the living environment is a duty for all residents who live and settle around the environment,

According to NOAA (National Oceanic and Atmospheric Administration), marine debris is defined as solid objects produced by humans, either directly or indirectly, intentionally or unintentionally disposed of in the marine environment (NOAA, 2013). Marine debris, especially from the type of plastic, has become a big problem throughout the world, not including Indonesia. In Indonesia, marine debris is a major problem and is reported as the second largest producer of plastic waste into the ocean after China (Lebreton, 2017; Jambek, 2015).

According to the Ministry of Environment (KLH), every day Indonesians produce 0.8 kg of waste or 189 thousand tons of waste per day. Some of this total waste is dumped directly into the waters and ends up in the sea.

Most of the plastic waste will end up in the ocean and the percentage is the largest around 60-80% compared to glass, iron, glass and paper (Moore, 2012). Jambeck et al. (2015) reported that in 2010 in Indonesia waste and waste generated was 0.52 kg per person per day and 11% of it was plastic. Waste that is not treated properly and that becomes waste is 83%.

Plastic waste entering the sea in Indonesia is estimated at 0.48-1.29 Million Metrics. Kompas daily launched from AFP on Saturday (2/6/2018), a pilot whale died in the waters of Songkhla province, Southern Thailand after swallowing about 80 plastic bags. After an autopsy, the plastic weight in the whale's body reached 8 kg. At least 300 marine animals including pilot whales, turtles and dolphins die every year in Thai waters from ingesting plastic. In addition, plastic in the sea will also hinder ship travel (waste fuel), interfere with aesthetics in tourist areas (loss of tourism), and health (Qiu et al., 2015).

The accumulation of marine debris is caused by the disposal of garbage by the community due to a lack of public knowledge about waste. Communities need to have good knowledge about waste, so they will have an awareness of the importance of marine waste management. Handling residential waste requires the active participation of individuals and community groups in addition to the government's role as a facilitator. With the increase in the quality of the marine environment that is free from garbage, the quality of life of the community will increase (Marojahan, 2015).

Torosiaje Village is a Bajo tribal village on the sea, which has been declared a Marine Tourism Village since 2007. It takes about seven hours to travel from Gorontalo City, to the place located in Popayato District, Pohuwato Regency.

In connection with the above, Kuranji Beach West Lombok has been facilitated by various buildings by the local government as a tourist area. From the observations of the tourist location, it is quite interesting because it faces the sunset and the stretch of beach is quite wide. The obstacle faced is that there are still people who live on the beach that have not managed their waste properly. In addition, marine debris carried by currents from outside also adds to the accumulation of garbage on the beach. If this situation is left unchecked, the government's goal of making tourist beaches can be hampered.

This program aims to provide education/awareness to the public: (1) the dangers of waste (especially plastic), (2) how to keep beaches clean. The benefits obtained from this activity are as follows: (1) With the emergence of awareness of the coastal community towards beach cleanliness, especially due to garbage, it is hoped that it will support government programs on marine cleanliness. (2) With this activity, it is hoped that this activity can be used as a basis for relevant agencies, especially the Regional Government, in efforts to manage waste at the beach.

Method

The research method used random sampling method by selecting randomly from the respondents, amounting to 250 students. The data taken in the study is qualitative data. Qualitative data is data obtained during socialization, practice and evaluation activities. The data was obtained from direct observation and explained descriptively.

Results and Discussion

In order to provide awareness to the public, before the activity students were asked to fill out a questionnaire that revealed indicators of students' understanding of marine cleanliness as listed in table 1 below.

- 1 Prohibition of throwing garbage in the sea
- 2 Pollution sea caused disposal trash in the river
- 3 Our oceans are already polluted with garbage

- 4 The dangers of plastic waste in the ocean
- 5 There is a lot of microplastic waste in the sea. The dangers rubbish microplastic
- 6 health
- 7 Loss of marine debris for tourism
- 8. Loss of marine debris for fishermen

The next activity is the presentation of pictures and explanations related to

No	Indicator	Percentag	
		Before	After
1	we can throw away trash in the sea	50	100

2 Throw garbage in river can cleanliness of the sea and ends with a discussion / question and answer. The presentation of the first image is Figure 1 which illustrates the difference between a sea polluted with garbage and a clean sea. Most of the students can answer questions well and have high seriousness. The results of the discussion regarding the results of image analysis can be concluded in table 2.

Table 2. Results of Student Discussion About Clean and Dirty Seas

Based on the data described in the results of these activities, the research team has a hypothesis that these activities have been able to provide students' awareness of the cleanliness of the sea. However, to be sure, at the end of the activity students were given a questionnaire. Score the results of the questionnaire at the beginning and at the end of the activity. The next presentation is related to plastic and microplastic waste pollution. Given that plastic waste pollution in the sea has a fairly large negative impact, the team provides a fairly in-depth explanation. In addition, plastic waste in micro size is also a sufficient polluter of

plastic and microplastic waste. Based on the data in table 4, it shows that the score of students' understanding of marine pollution before and after the activity is quantitatively different. The things that are still poorly understood/realized by students (below 70%) are about: microplastic waste, the dangers of microplastics, the loss of fishermen and tourism due to marine waste, and the impact of throwing garbage in the river on marine pollution. . After students follow the explanation systematically by providing concrete examples and explaining the causes, processes and consequences that occur, students can understand well, so that the final score shows a high value. This shows that students already have a good understanding of the cleanliness of the sea. Changes in students' understanding of marine cleanliness as an effect of this counseling can be shown in Figure 1. and the impact of throwing garbage in rivers on marine pollution. . After students follow the explanation systematically by providing concrete examples and explaining the causes, processes and consequences that occur, students can understand well, so that the final score shows a high value. This shows that students already have a good understanding of the cleanliness of the sea. Changes in students' understanding of marine cleanliness as an effect of this counseling can be shown in Figure 1. and the impact of throwing garbage in rivers on marine pollution. . After students follow the explanation systematically by providing concrete examples and explaining the causes, processes and consequences that occur, students can understand well, so that the final score shows a high value. This shows that students already have a good understanding of the cleanliness of the sea. Changes in students' understanding of marine cleanliness as an effect of this counseling can be shown in Figure 1. This shows that students already have a good understanding of the cleanliness of the sea. Changes in students' understanding of marine cleanliness as an effect of this counseling can be shown in Figure 1. This shows that students already have a good understanding of the cleanliness of the sea. Changes in students' understanding of marine cleanliness as an effect of this counseling can be shown in Figure 1.



Figure 1. Diagram of changes in students' understanding of marine cleanliness after k

Based on the quantitative data, it shows that after the service activities there is an increase in students' understanding of the cleanliness of the sea. Based on the qualitative data as described in the results of the activity, it also shows that there is a high concern for the cleanliness of the sea. Therefore, it can be interpreted that this outreach activity can increase students' awareness of the cleanliness of the sea. This is in accordance with the opinion of Chalmers (1995) that consciousness is described as a mental state that contains propositional things, such as beliefs, hopes, worries, and desires.

Conclusion

From the results of this community service activity, the following conclusions can be drawn: The relationship between Knowledge of Environmental Conservation and Student Participation in Environmental Hygiene shows a negative relationship. `

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