

First Aid Training For Divers In Watu Ulo Village

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Abstract: Health problems among divers in Watu Ulo Hamlet were increased incidence of emergencies in divers and the absence of a first aid training program for emergency diving incidents. The first aid training program for divers used the roleplay method is one program that can be attempted to prevent of death. This program collaborates with the Sumberejo Village apparatus consisting of the Head of Watu Ulo Hamlet and the Head of the Payangan Beach Diver's Association. The methods used to achieve these goals are 1) situation analysis, 2) preparation, 3) training, and 4) evaluation and assistance to fishermen to see the suitability of the problem with the alternative solutions provided. The training results showed that 75% of fishermen experienced increased knowledge, 60% increased attitudes, and 85% experienced increased skills and expressed satisfaction with holding first aid training activities for fishermen's emergencies using the role-play method.

Keywords: emergency; divers, basic life support

Introduction

Indonesia is the second largest country out of 198 countries with 55 regions as the longest coastline. This condition causes Indonesia to be called a maritime country (The World Factbook, 2016). Data shows that Indonesia has very large natural resources in the fields of waters and fisheries, so that human activities are mostly carried out in this field. The prevalence of the number of Indonesian people with a livelihood as divers in 2022 is 1.27 million people, while in East Java in 2022 there are 131,844 people. The large number of community activities in the fisheries and waters sectors has caused an increase in the number of problems including health problems experienced by divers. The increase in the death rate of divers is also accompanied by an increase in the number of emergency incidents. Emergencies that are often experienced by divers are decompression, muscle cramps and heart. The Divers Alert Network reports the incidence rate of emergency diseases in divers as much as 35.3 per 10,000 dives (Pollock and Buteau, 2017). The incidence of emergency incidents in the Hawaiian Islands and Asia Pacific is around 1-35 incidents per 1,000 divers (Hall, 2017). Barrang Lompo Island is one of the islands in Indonesia located in the city of Makassar, most of whose residents work as sea cucumber divers. It was recorded that up to 2017, 81 divers experienced emergency diseases and 70 people died. Apart from the data obtained from the health center, it is suspected that there are still many cases of diving accidents that are not reported by the community.

The Jember Regency Fisheries and Marine Service said that the largest number of divers is in Ambulu District, which is 80%. Marine fish production at Ambulu Beach, precisely in Watu Ulo Hamlet, Sumberejo Village, is one of the largest fish productions which is famous for its catch, namely grouper and lobster, so it is very risky for divers to experience emergencies because to get them they have to dive.

The results of an interview with the Head of the Watu Ulo Hamlet Divers Forum stated that there were emergency incidents in divers after diving in 2022. The results of interviews with 10 divers showed that divers had experienced joint pain while diving (60%), headaches after diving (80%), and joint stiffness (20%). Divers said they did not understand what to do when other divers experienced an emergency. Role play is a learning technique where training participants are asked to directly apply a certain role in dealing with special situations. The strength of the role play method is that it provides a direct picture of behavior, and trains abilities related to human behavior. The results of the study showed an increase in knowledge and skills in helping drowning victims after role play was carried out (Hady et al., 2020). This increase in knowledge and skills is because the role play method is able to improve communication, cognitive, psychomotor, self-reflection, critical thinking and self-efficacy. Participants are also more enthusiastic about trying and doing role play, working together and having a lot of fun so that the knowledge provided is easy to understand. Referring to the dangers of emergencies that threaten the safety of divers, the stimulus community partnership program activities will collaborate with the local government of Watu Ulo Hamlet to improve knowledge and skills in first aid in emergency cases in order to reduce undesirable impacts due to the inability to handle emergencies in Watu Ulo Hamlet, Sumberejo Village, Ambulu District.

Methodology

a. Situation analysis

This stage aims to obtain a picture of the partner's specific problems based on observations and communication with partners. The activities carried out are:

1. Communicating with partners in this case the Sumberejo Village Apparatus, Ambulu District, Jember.
2. Conducting focus group discussions with the Sumberejo Village apparatus and the head of the diver association.
3. Processing permits to BAKESBANGPOL and the Head of Sumberejo Village, then forwarded to the Head of Watu Ulo Hamlet.

b. Preparation

This stage is carried out as a step to coordinate the implementation team with partners. Activities carried out:

1. Communicating with the community partnership stimulus program (PKMS) implementation team.
2. Preparing the tools and materials needed
3. The community partnership program team coordinates with partners regarding the implementation of the program. The person responsible for this activity is the head, members

4. Making agreements on the activity schedule, place, participants, facilities and infrastructure used and the implementation of activities.

c. Implementation

This stage is the implementation of solutions that have been jointly determined. At this stage, the potential in the environment is re-explored as empowerment in dealing with problems. At this stage, the implementation was carried out for divers in Watu Ulo Hamlet, Sumberejo Village, Ambulu District, Jember. Activities carried out:

1. Conducting socialization about first aid training activities in emergency cases through the role play method to the diver association in Watu Ulo Hamlet, Sumberejo Village, Ambulu District, Jember.
2. Providing modules and media and equipment needed to carry out first aid training in emergency cases.
3. Providing first aid training in emergency cases through the role play method to divers with the PKMS team.

d. Mentoring and evaluation

This stage aims to assist partners in a consultative manner with problems found when running the implementation results. Activities carried out:

1. Conducting an evaluation of the process from the beginning to the end of the activity. The team also responded to partners during the implementation.
2. Conducting an evaluation of the knowledge and skills of divers in providing first aid in emergency cases after participating in training with the role play method.
3. Conducting ongoing mentoring for divers related to the difficulties still faced during the mentoring period as an illustration of the suitability of the selection of alternative solutions.

Result and Discussion

Community service activities were carried out on divers on the coast of Payangan Beach, Watu Ulo Hamlet, Sumberejo Village, Ambulu District, Jember Regency. The partner in this program is the Watu Ulo Hamlet diver forum. In this activity, the team acted as speakers, facilitators, and activity companions. The activity took place on February 25, 2024 at the Watu Ulo Hamlet Hall with a time allocation of 90 minutes, consisting of 50 minutes of material delivery and discussion and 40 minutes of role play. The participants who could attend this activity were 14 people. The activity began with the facilitator accompanying the participants to fill out a questionnaire, then continued with the presentation of the material and then role play was carried out.

Table 1: Demographic Data of Participants

Category	n	%
Age		
a. 20 – 30	4	28,6
b. 31 – 40	9	64,3
c. 41 – 50	1	7,1
Total	14	100
Gender		
a. Male	14	100
b. Female	0	0
Total	14	100
Education		
a. Primary school	3	21,4
b. Junior high school	6	42,9
c. Senior high school	4	28,5
d. Collage	1	7,2
Total	14	100
Length of Working as a Diver		
a. < 5 years	3	21,4
b. 5 - 10 years	2	14,3
c. 11 – 15 years	8	57,1
d. 16 – 20 years	1	7,2
e. > 20 years	0	0
Total	14	100

Table 1. Shows that the majority of divers are aged 31-40 years (64.3%), male (100%), live with family (85.7%), with the last education of junior high school (42.9%), and have worked as divers for 11-15 years (57.1%).

The results show that the majority of divers experienced an increase in knowledge, attitudes, and skills, especially those related to emergencies (Diagram 1). Knowledge is assessed from the diver's ability regarding the concept of emergency, namely the definition, causes, characteristics, and risk factors for emergencies. Emergency management can be done by providing Cardiopulmonary Resuscitation (CPR). Attitudes towards emergencies are related to self-response to emergency prevention, and the ability to provide first aid through roleplay methods in emergency cases.

Increasing knowledge, attitudes, and first aid skills in divers can be caused by age factors. The results of a demographic survey show that the majority of divers are aged 31-40 years. The age of 31-40 years is a productive age where someone can easily accept and absorb information. These data are in accordance with the results of research (Sa'adah, Martadani and Taqiyuddin, 2021) which states that the older the age, the level of maturity and strength of a person will be better in thinking and working, due to experience and mental maturity. The results of this community service are relevant to the results of Sa'adah's research that productive age can increase the ability to absorb information due to mental maturity and maturity in thinking.

Evaluation of this activity is carried out through 2 stages, namely process and result evaluation. The results of the process evaluation carried out on divers who participated in

the training program provided by the facilitator. The evaluation of the results showed that 100% of divers experienced an increase in knowledge, attitudes, and skills and expressed satisfaction with the holding of first aid training activities for emergency cases using the roleplay method.

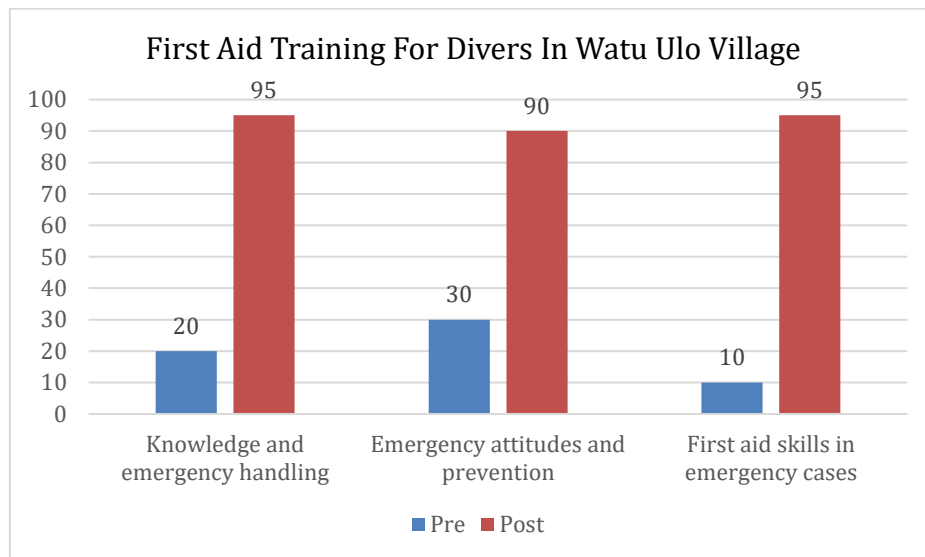


Diagram 1. First Aid Training For Divers In Watu Ulo Village



Figure 1. Diver forum during emergency first aid training activities

Conclusion

Community service activities have been carried out on divers on the coast of Payangan Beach, Watu Ulo Hamlet. The activity took place on February 25, 2024 at the Watu Ulo Hamlet Hall with a time allocation of 90 minutes, consisting of 50 minutes of material delivery and discussion and 40 minutes of role play. The participants in this activity were 14 fishermen. The activity began with the facilitator accompanying the participants to fill out a demographic data questionnaire and continued with Cardio Pulmonary Resuscitation

(CPR) training using the roleplay method. The results of the community service were that the majority of fishermen experienced barotrauma. Evaluation of this activity found that 75% of fishermen experienced increased knowledge, 60% increased attitudes, and 85% experienced increased skills and expressed satisfaction with the holding of emergency first aid training activities using the roleplay method. Suggestions that can be given for this community service are that several related parties, namely the government and local health workers, should start increasing health screening for fishermen considering the high risk of work that can threaten safety.

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