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RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDE WITH THE USE OF PERSONAL PROTECTION EQUIPMENT (PPE) ON DIVERS IN DODOWO VILLAGE, GALELA UTARA DISTRICT, UTARA HALMAHERA REGENCY

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ABSTRACT

Background The Global Era is marked by flattening borders between countries which will trigger a swift transition in all areas of occupational health and safety or known as K3. Many fishermen on the island of Bengin, West Nusa Tenggara suffer from arthritis (57.5%), as well as fishermen who experience mild to deaf hearing (11.3%), while fishermen who experience cases of barotrauma in the Thousand Islands, DKI Jakarta (41 ,37%) and decompression sickness which usually afflicts divers (6,91%).

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Research Purpose This research was carried out on fishermen in Dododwo Village, North Galela District, North Halmahera Regency, This research will be conducted in August – September 2021.

Research Methode This type of research is an analytic survey of the cross sectional or cross-sectional approach, where all respondents have the opportunity to be a sample. The population is about the overall fishermen in the fishermen group in the village of Dodowo, North Galela sub-district. Based on initial data, obtained from secondary data in Dodowo Village, it is known that the population is 117 heads of families The sampling process in this research is to use the Random Sampling technique. **Result** the results show that the relationship between the level of knowledge and the use of personal protective equipment for divers, with good knowledge and use of complete personal protective equipment is 9 people (16.7%), good knowledge and use of incomplete personal protective equipment is 1 person (1.9%) , sufficient knowledge and use of good personal protective equipment are 0 people (0%), sufficient knowledge and incomplete use of personal protective equipment are 19 people (35.2%), lack of knowledge and use of complete personal protective equipment are 0 people (0%), lack of knowledge and use of incomplete personal protective equipment amounted to 25 people (46.3%). **Conclusion** This can give the conclusion that the knowledge of traditional divers can be related to the

incidence of work accidents. The higher the knowledge of traditional divers, it can also have a positive effect on the application of occupational health and safety.

Introduction

The Global Era is marked by flattening borders between countries which will trigger a swift transition in all areas of occupational health and safety or known as K3. The analysis in the aspect of K3 (Occupational Health and Safety) has a negative influence and a positive influence, the negative effect is that there is unpreparedness to anticipate obstacles in global competition that can cause work-related illnesses or commonly called work accidents and the positive effect is that it can easily scavenge information from countries that the industry has grown.¹

Traditional divers are divers who dive using traditional equipment, namely a compressor which is used as a diver's air distributor. Many fishermen on the island of Bengin, West Nusa Tenggara suffer from arthritis (57.5%), as well as fishermen who experience mild to deaf hearing (11.3%), while fishermen who experience cases of barotrauma in the Thousand Islands, DKI Jakarta (41 ,37%) and decompression sickness which usually afflicts divers (6,91%).²

The number of sufferers and deaths due to diving diseases is based on data obtained from the Maluku Provincial Health Office in 2017, with barotrauma totaling 221 people, paralysis totaling 27 people, 7 people dying of paralysis and 21 marine animal bites.

In Dodowo Village, North Galela Subdistrict, some of the local people's jobs are fishermen, who usually dive to find fish on a daily basis. According to the data taken, the number of families in Dodowo Village is 300 families, who have jobs as fishermen, totaling 117 families. So from these data it can be concluded that "The Use of Personal Protective Equipment (PPE) in Compressor Divers" is really important to use in order to prevent accidents due to diving.

Types of research

This type of research is an analytic survey of the cross sectional or cross-sectional approach, where all respondents have the opportunity to be a sample.¹⁶

Population and Sample

1. Population

The population is about the overall fishermen in the fishermen group in the village of Dodowo, North Galela sub-district. Based on initial data, obtained from secondary data in Dodowo Village, it is known that the population is 117 heads of families.

2. Sample

The sample can be interpreted as part of what is taken from the whole thing that is examined and is considered to have the entire population. The sampling process in this research is to use the Random Sampling technique.

Characteristics of Respondents

The individual characteristics observed in this study were: age and education. Based on the data found from the data collection carried out, the results obtained are:

Table 4.1 Frequency Distribution According to Age group

Age	Frequency	Persentase
20-30 Age	13	24.07%
31-40 Age	25	46.30%
>40 Age	16	29.63%
Total	54	100.00%

Based on the data in table 4.1, it shows that from 54 respondents, the number of respondents aged 20-30 years was 13 respondents (24.07%) and 31-40 years old, there were 25 respondents (46.30%) and >40 years, totaling 16 respondents (29.63%).

Table 4.2 Distribution of Respondents Frequency by Education Level in Dodowo Village, North Galela District, North Halmahera Regency.

The results of the data in table 4.2 show that of the 54 respondents with an elementary level education background, 36 respondents with a percentage (66.67%), junior high school level amounted to 11 respondents with a percentage (20.37%) and a high school level amounted to 7 respondents with a percentage (12.96%).

Univariate Analysis

This univariate analysis was carried out to be able to see the frequency distribution of data from the dependent and independent variables in research on the relationship between knowledge and attitudes of using personal protective equipment (PPE) in compressor divers.

Table 4.3 Distribution of Respondents Based on Knowledge of Divers in Dodowo Village, North Galela District, North Halmahera Regency.

Pengetahuan	Frekuensi	Persentase
Baik	10	18.52%
Cukup	19	35.19%
Kurang	25	46.30%
Total	54	100.00%

Based on the data obtained, the knowledge of divers is categorized as good, totaling 10 respondents with a percentage (18.52%), only 19 respondents with a percentage (35.19%) and

in the category of less than 25 respondents with a percentage (46.30%).

Table 4.4 Frequency Distribution of

Knowledge	Frequency	Persentase
SD	36	66.67%
SMP	11	20.37%
SMA	7	12.96%
Total	54	100.00%

Respondents Based on Attitudes of Compressor Divers in Dodowo Village, North Galela District, North Halmahera Regency.

Sikap	Frekuensi	Persentase
Baik	18	33.33%
Cukup	15	27.78%
Kurang	21	39.89%
Total	54	100.00%

Based on the data obtained, the attitude of the diver is categorized as good, totaling 18 respondents with a percentage (33.33%), only 15 respondents with a percentage (27.78%), and in the category of less, there are 21 respondents with a percentage (39.89%).

Table 4.5 Distribution of Use of Personal Protective Equipment (PPE) in Dodowo Village, North Galela District, North Halmahera Regency.

Penggunaan	Frekuensi	Persentase

APD		
Lengkap	9	17%
Tidak Lengkap	45	83%
Total	54	100%

According to the data obtained, the use of personal protective equipment (PPE) is categorized as complete, totaling 9 respondents with a percentage of 17% and categorized as incomplete, totaling 45 respondents with a percentage of 83%.

Bivariate Analysis

Table 4.6 Frequency Distribution by Level of Knowledge with the Use of Personal Protective Equipment (PPE) on Compressor Divers in Dodowo Village, North Galela District, North Halmahera Regency.

Pengguna			
Variabel	Kategori APD	N	Distribusi
Lengkap			
Tidak Lengkap			
Baik	9	1	10
	16.7%	1.9%	18.5

				%	
Pengengetahuan	Cukup	0	19	19	
	Tidak Cukup				
		0.0%	32.5	32.5	2
			%	%	00
Kurang				25	
Tidak Pengetahuan		0.0%	46.3	46.3	
			%	%	
	Total	9	45	54	
	1				
		16.7%	83.3	100.	
			%	0%	

Based on table 4.6 the results show that the relationship between the level of knowledge and the use of personal protective equipment for divers, with good knowledge and use of complete personal protective equipment is 9 people (16.7%), good knowledge and use of incomplete personal protective equipment is 1 person (1.9%) , sufficient knowledge and use of good personal protective equipment are 0 people (0%), sufficient knowledge and incomplete use of personal protective equipment are 19 people (35.2%), lack of knowledge and use of complete personal protective equipment are 0 people (0%), lack of knowledge and use of incomplete

personal protective equipment amounted to 25 people (46.3%).

16.7% 83.3 100
% .0%

Table 4.7 Distribution of Frequency Based on Attitude Levels with Use of Personal Protective Equipment (PPE) in Dodowo Village, North Galela District, North Halmahera Regency.

Variabel	Kategori	Penggunaan APD			N	Df	p-Value
		Lengkap	Tidak Lengkap				
Sikap	Baik	9	9	10			
		16.7%	16.7%	18.5%			
	Cukup	0	15	18			
		0.0%	27.8%	27.8%	4	0.000	
Perilaku	Kurang	0	21	21			
		0.0%	33.9%	33.9%			
	Total	9	45	54			

Based on table 4.7 the results show that the relationship between the level of attitude and the use of personal protective equipment for divers, with a good attitude and the use of complete personal protective equipment amounted to 9 people (16.7%), good attitude and the use of incomplete personal protective equipment amounted to 9 people (16.7%)., sufficient attitude and good use of personal protective equipment are 0 people (0%), sufficient knowledge and use of incomplete personal protective equipment are 15 people (27.8%), lack of attitude and use of complete personal protective equipment are 0 people (0%), lack of knowledge and use of incomplete personal protective equipment amounted to 21 people (38.9%).

Discussion

With these results it can be concluded that the amount of knowledge lacking in divers is more and divers who are incomplete use personal protective equipment more than divers who are complete use personal protective equipment.

The results of this study are the same as research which states that the results of the research carried out on fishermen have less knowledge regarding the use of personal protective equipment, fishermen do not understand regulations regarding work safety and do not understand techniques when diving. This can give the conclusion that the knowledge of traditional divers can be related to the incidence of work accidents. The higher the knowledge of traditional divers, it can also have a positive effect on the application of occupational health and safety.

Through the characteristics of the respondents, the researchers obtained the education level of divers with an elementary level of 36 people with a percentage (66.67%), a junior high school level of 11 people and a percentage (20.37%) and a high school level of 7 people and a percentage (12.96%).

Education can influence personal thinking in carrying out daily activities and work. Through the results of the SPSS 25 test using the chi square test, this study obtained a value of 0.00 which assumes in the survey from statistical instructions that the points listed are even smaller than the significant standard which is 0.05 then it can be concluded that there is a relationship between attitude and use personal protective equipment (PPE) on compressor divers.

The results of the study stated that the number of attitudes was more or less than respondents who had good and sufficient attitudes. This can be seen in table 4.7 which states that there are 21 respondents out of 54 respondents who do not fully use personal protective equipment (38.9%).

Factors that can influence attitudes are education, religion and emotion. This is in accordance with this study where the attitude of divers in Dodowo village is influenced by one of the educational factors, where most compressor divers have low education so they have a poor understanding of the importance of using personal protective equipment when diving which can affect their behavior. .

Based on the frequency distribution, it is known that people's attitudes are good (23.9%), moderate attitudes (62.0%) and poor attitudes (14.1%). Based on the chi-square statistical test, we get p value = 0.005 which is compared with = 0.05 (p value 0.05) so that it is concluded that there is

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