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## Occupational Health and Safety Behavior in the Fisherman Group of Muara Tembulih Village, Ngambur District, Pesisir Barat

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### ABSTRACT

**Background:** Occupational health and safety is a right for workers in the formal and informal sectors, as well as for fishermen. Fishermen are very vulnerable to work accidents. This is caused by fishermen's lack of knowledge about occupational health and safety. As many as 80% of marine accidents are caused by human error and other causes are negligence by maritime transportation organizers and related agencies, as well as inadequate marine transportation safety equipment. Based on the background of this problem, this research was carried out to find out work health and safety behavior among fishermen groups in Muara Tembulih Village, Pesisir Barat Regency.

**Method:** This research uses descriptive research with a qualitative approach. The independent variables in this research are fishermen's knowledge, attitudes and beliefs. The dependent variable of this research is the occupational health and safety behavior of fishermen groups.

**Result:** The results of this research are that fishermen define occupational health and safety as traditional knowledge about safety when fishing, based on empirical experience passed down from generation to generation from their ancestors and combining knowledge obtained through government outreach. Fishermen in realizing occupational health and safety behavior with simplicity and knowledge are quite good, in bad weather conditions fishermen prefer not to go to sea due to the high risk. Fishermen are aware of the importance of occupational health and safety for fishermen, therefore fishermen bring personal protective equipment before going to sea as an alternative to bad conditions at sea. Including considering bad weather, fishermen prefer to return to their home villages for safety. Fishermen's actions in realizing occupational safety and health behavior from observations are still simple.

**KEYWORDS:** fishermen, occupational health and safety

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### 1 INTRODUCTION

Occupational health and safety is a right for workers in the formal and informal sectors, including fishermen. Fishermen are very vulnerable to work accidents. This is caused by fishermen's lack of knowledge about occupational health and safety. There are many types of fishermen according to the length of time at sea, there are daily, weekly and monthly fishermen. Lack of knowledge and inappropriate attitudes regarding sanitation hygiene when fishing causes many fishermen to experience work accidents (Ratri and Paskarini, 2014).

Analysis from the Center for Occupational Occupation Injury (CFOI) conducted by the Bureau of Labor Statistics (BLS) states that the risk of occupational accidents for fishermen is 20 – 30 times compared to other types of work. The general risk is that almost all of the work equipment in the form of canoes is not equipped with self-rescue equipment, low level of education is also a large risk borne due to lack of knowledge and dismissive attitudes. The International Labor Organization (ILO) shows that every year 1.1 million deaths occur due to work-related illnesses or accidents (Wibisono, 2013).

Developing countries such as Southeast Asia still have fishermen who use simple, very limited and inadequate equipment, in contrast to developed countries which use modern equipment. This can influence and support potential hazards that could occur if fishermen work outside of established work health and safety procedures (Kalalo et al, 2016).

### 2 METHOD

This research is descriptive research with a qualitative approach. Qualitative research is a method that emphasizes aspects of deeper understanding of a problem rather than looking at a problem. Apart from that, qualitative research is used to find data in depth and with meaning (Sugiyono, 2017). This research is to analyze occupational health and safety behavior among fish fishermen in Muara Tembulih Village, Ngambur District, Pesisir Barat Regency. This type of qualitative descriptive research uses an ethnographic

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approach and sampling using purposive sampling among fishermen in Muara Tembulih Village, Ngambur District, Pesisir Barat Regency.

According to Miles and Huberman, qualitative data analysis is carried out interactively through data reduction, data display and verification processes. Meanwhile, according to Spradeley, it is carried out sequentially, through a process of analysis, taxonomy, components and cultural themes (Sugiyono, 2017). Data analysis in qualitative research is collecting, organizing, classifying and sorting data to obtain important data into information. The data analysis technique has stages that are carried out after the data collection process to obtain good information, namely: data reduction, data display (data interpretation), and conclusion drawing/verification (drawing conclusions).

### **3 RESULTS**

Based on the research results, the informants consisted of 5 workers, 1 community figure, 1 local government official and 2 UKK post people. The majority of informants are male with ages ranging from 20 years to 60 years. In general, the level of education of the informants varies with 5 people up to elementary school and 4 people at strata 1. The informants in this research live or live and own areas. Informants were selected based on research criteria using the snowball technique, namely selecting informants based on criteria determined by researchers, such as fishermen, local government, traditional leaders, community leaders, who were willing to be interviewed.

#### **Fishermen's Knowledge about Occupational Health and Safety**

Occupational health and safety is an effort to provide protection to workers and other people from potential things that can cause danger and threaten workers' health. For fishermen who in fact work in the informal sector, occupational health and safety are very important because of the high occupational risk factors that fishermen must face. Therefore, implementing appropriate occupational health and safety behaviour is very necessary to prevent fishermen from work accidents.

According to Purwangka (2016) knowledge is the result of knowing and this occurs after people sense a particular object. The knowledge of fisherman informants is everything that is known about efforts to realize occupational safety and health behavior which is a support in carrying out actions or behavior in carrying out fishing activities. Occupational Safety and Health has so far been interpreted by fishermen as a phenomenon but is weak in terms of technical knowledge related to the description of occupational health and safety itself. So that occupational health and safety is misunderstood as just knowing that you are safe and healthy, but there is minimal implementation to realize occupational health and safety itself. Koeshendrajana (2015) said that in terms of human resources, the majority of small-scale capture fisheries businesses are not yet supported by a skilled and educated workforce, generally only elementary school graduates with skills acquired from generation to generation. Ryan Suryadi Putra et al (2017) in his research "Managing Work Safety for Fishermen in Batukaras, Pangandaran Regency" also stated that fishermen do not understand work safety at sea and existing procedures and only rely on minimal knowledge regarding safety. Fishermen usually only look for signs from nature before going to sea and do not bring the safety equipment they should carry.

The use of safety and personal protective equipment is a very important aspect for fishermen when going to sea. The informant's knowledge regarding the use of safety and personal protective equipment based on the results of in-depth interviews shows that this is not too much of a concern for fishermen. When going to sea, fishermen do not use buoys as a safety device. They think that this tool is not very important and is only a hassle to use (Ramli, et al, 2017). Some informants also said that what was the point of always carrying a life vest when they never used it? Apart from that, there is a pammali cultural factor which says that using a life jacket actually gives the impression of praying for oneself to avoid an accident. This is based on fishermen's understanding that using a buoy is a form of hesitation about going to sea, which can actually trigger accidents.

The Ministry of Health (2015) in its book Guidelines for Organizing Training for Occupational Health Cadres, also explains that efforts to control potential dangers for fishermen can be done by wearing long-sleeved clothing and hats, wearing work clothes, providing life jackets and bringing sufficient food supplies. Fishermen said that if an accident occurs that causes the boat to capsize or sink, fishermen can hold on to their boat and also rely on jerry cans as an alternative life jacket. This is based on the experience of fishermen when they have an accident and don't bring a life jacket, so the jerry can is an alternative to prevent drowning. Moreover, the jerry can has a cover so it doesn't sink and can help fishermen to stay afloat. Cork is also another choice for fishermen because of the nature of the object which can also float in the sea.

However, for Personal Protective Equipment, especially fishermen's work clothes, they wear long-sleeved shirts or jackets, trousers and hats, but do not wear shoes or gloves. This is motivated by the benefits felt by fishermen, they said that hats can be used to protect the face from the hot sun. Likewise, wearing long-sleeved shirts and long trousers also serves to protect the body from exposure to the sun's heat. The informant also added that choosing training trousers rather than jeans is also based on flexibility when moving and ease of swimming when falling. Meanwhile, fishermen do not use shoes because they are considered to only interfere with the informant's work movements (Ulfa, 2017)

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Fishermen choose not to wear footwear at all, including sandals, for the reason that it is easier to accelerate. As for gloves, fishermen believe that using them makes it difficult to pull fishing lines which are very thin. Sometimes the use of gloves means fishermen do not feel the rope breaking due to the strong pull (Riantoro, et al, 2017). With the experience that we directly felt and carried out, fishermen can then sort out the use of safety and personal protective equipment that really supports their safety when at sea. One way to obtain non-scientific truth is based on personal experience. This is done by repeating the experience gained in solving problems faced in the past (Syahri and Fitria, 2018)

However, this is not enough to change the behavior of fishermen to use personal protective equipment. In fact, to form a "KNOW" behavioral process for fishermen, an effort is needed that is able to make them interested (feel interested) where individuals begin to pay attention and are interested in the stimulus given to use personal protective equipment. According to Ryan Suryadi Putra, et al (2017), fishermen have very minimal knowledge regarding work safety, and the rules related to work safety that fishermen know are also very minimal. Fishermen only know that work safety depends on the individuality of each person doing it. If the weather is good, fishermen will go to sea, but if the weather is bad, fishermen will not go to sea. Synergistic collaborative efforts between experience and education regarding occupational health and safety are needed. According to Rosane A.F. Doimo (2017) in his research "The importance of using protective equipment to reduce accidents in the work of fishermen from Santos" said that the work accident rate among fishermen which reached 19.6% causes the importance of inspection activities and work culture regarding the use of appropriate preventative equipment for fishermen really encourages the success of fishermen.

Knowledge regarding weather conditions before going to sea is also very important for those who make their living as fishermen. Because weather is a natural condition that is difficult to predict. Therefore, looking at natural signs and celestial objects is something that is highly recommended for fishermen before going to sea to ensure their safety and health. (Riantoro, et al, 2017) Fishermen stated that to find out the weather conditions before going to sea, they carried out several analyzes of the conditions of the sky, clouds and sea waves that occurred on the coast. If the sky is cloudy, thick black clouds, especially accompanied by lightning, and the sea waves on the beach are very high, then there is a high probability that the weather will be heavy rain accompanied by strong winds and big waves. Especially when entering the West season which is also known as the rainy season in Indonesia.

Dewi Ekasari (2018) in her research "Risk Analysis of Small-Scale Capture Fisheries Businesses in Palabuhan Ratu" said that risky events which are classified as uncontrolled conditions are caused by natural factors such as strong winds, large waves, strong currents, distribution of fish in the waters and seasons. fish. The symptoms most often felt by fishermen are headache, fever, cramps, aches and chills. When experiencing excessive physical symptoms, fishermen will decide to rest and return to sea when they feel much better. However, when there are no significant changes for 3-4 days, the fisherman will seek treatment at the nearest shaman or community health center.

This was triggered by self-awareness that health is a supporting aspect of the productivity of the catch that can be obtained. According to Elpida Frantzeskou (2017) in her research "Prevalence of Health Risk Factors among Fishermen – A Review" said that health risk factors among fishermen need to be highlighted and investigated further, representing occupational risks that have a major impact on the prevalence of chronic diseases on the quality and duration of fishermen's lives. as well as their future careers in the fisheries sector.

### **Attitudes Regarding Recommendations for the Use of Health and Personal Protective Equipment**

This question concerns the attitude of the informant regarding the recommendation to use Personal Protective Equipment before and while going to sea. This recommendation is due to the large risk of work accidents while at sea. Plus the potential dangers that lurk fishermen. Informants stated that their attitude was very positive in responding to the recommendation to use Personal Protective Equipment when at sea because they were also aware that working at sea carries a very high level of risk compared to land and was afraid of accidents that could occur. However, the informant thought that this was a consequence of going to sea. As well as awareness among fishermen themselves which triggers every time they go to sea to bring personal protective equipment. According to several informants, as a result of counselling and self-awareness, some fishermen even bought personal protective equipment on their own and some were waiting for a helping hand from the government. Some of the personal protective equipment that fishermen always carry are tools that their descendants have taught them to consider important. The impact of not using personal protective equipment for fishermen is not too urgent for their personal study on the grounds that their fishing location or point has become a routine that they visit. But they still carry personal protective equipment and even medicine.

Fishermen's work attitudes describe fishermen's character tendencies in choosing risks. Fishing activities that are considered high risk are fishing during the western season. This is related to natural conditions that do not support fishing operations and can also threaten life safety (Ekasari, 2018). According to Mohammad Nasrullah, (2018) perception of risk is greatly influenced by the hope of gaining more economic value if you dare to take risks. The results of the analysis from in-depth interviews conducted with fishing informants also illustrate that the recommendation for the use of safety and personal protective equipment when going to sea received a positive response. They realize that going to sea without using safety and personal protective equipment is considered a high risk

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attitude. This was triggered by fishermen's empirical experience that going to sea is a job with very high risks (Talitha Wenifrida, 2017).

Affectionately, they consciously understand that it is very risky to go to sea without using safety and personal protective equipment. Cognitively, their thinking is positive that the safety aspect is indeed an important thing to be realized with one of their efforts being to use safety and personal protective equipment, but in action they still choose to ignore this recommendation. Several results of empirical studies related to fishermen's preferences for risk also show that there is a positive relationship between the level of fishermen's income and their level of preference for risk. The more they like risk, the higher the income from their fishing efforts (Imron, et al. 2017).

This description provides an illustration that economic demands are in line with the risks chosen by fishermen, as well as for fishermen. They will choose to continue going to sea even without using life jackets and adequate personal protection because they consider that this is a logical consequence of working as fishermen. This is further strengthened by the fact that the majority of fishermen do not have a side job apart from being a fisherman so that not going to sea automatically eliminates their source of income. Furthermore, this will have an impact on the survival of fishing families (Supriyanto and Purwaningsih, 2017).

### **Fishermen's Occupational Safety and Health Behavior**

After someone knows the stimulus, they then make an assessment or opinion regarding what they know to implement and put into practice. An attitude that is not yet optimistic is realized in action. In order for the attitude to become a real action, supporting factors are needed in the form of facilities and support from other parties. Counselling and raising awareness among fishermen regarding the importance of occupational health and safety is the main thing that is a shared responsibility so that the quality of life of the community can improve. The results of interviews and observations carried out showed that there were several actions taken by informants regarding the use of Personal Protective Equipment when going to sea and before going to sea by fishermen.

Behavior is a rule that establishes a close relationship between attitudes and actions which is supported by attitudes which say that attitudes are views or feelings accompanied by a tendency to act (Purwanto, 2019). Assessment of actions taken by informants was carried out through in-depth interviews and direct observation. Informants stated that to achieve safety and health when at sea, the precautionary aspect must remain the main concern (Oktofina Sir, et al, 2017)

To deal with uncontrolled conditions which include weather conditions such as large waves, strong winds, fishing fishermen take preventive measures, namely deciding not to go to sea. This is triggered by the very high risk of work when continuing to go to sea when the weather is bad. Timothy J. Emery (2016) in his research "Fishing for revenue: how leasing quotas can be dangerous to your health" said that in general, fishermen avoid physical risks (wave height), but this is offset by the increase in expected income.

Initial actions before going to sea are also a determining factor as a safe first step before going to sea. Because in the concept of good work management, the aspect of good preparation will support efforts to prevent work accidents. Therefore H.W. Heinrich, in the domino effect theory, says that efforts to prevent work accidents through controlling workplace hazards can be done by monitoring and controlling unsafe actions in the workplace. In fact, the research results of Lisa Pfeiffer (2016) in her research "The effect of rights-based fisheries management on risk taking and fishing safety" say that institutional changes can significantly reduce individual and voluntary risk exposure and result in safer fisheries (Asruddin and Syariah , 2018).

## **4 CONCLUSIONS**

Based on the results of research regarding occupational safety and health behavior among fishermen, it can be concluded that:

1. Fishermen define Occupational Health and Safety as traditional knowledge about safety when fishing, based on empirical experience passed down from generation to generation from their ancestors and combining knowledge obtained through government outreach.
2. Fishermen in realizing occupational health and safety behavior with simplicity and knowledge are quite good, in bad weather conditions fishermen prefer not to go to sea due to the high risk. Fishermen are aware of the importance of occupational health and safety for fishermen, therefore fishermen bring personal protective equipment before going to sea as an alternative to bad conditions at sea. Including considering bad weather, fishermen prefer to return to their home villages for safety.
3. Fishermen's actions in realizing occupational safety and health behavior from observations are still simple.

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