

AN OVERVIEW OF THE PREPAREDNESS OF FISHERS ABOUT FIRST AID IN DROWNING (WATER RESCUE) AT LABUHAN BEACH, ANTIGA VILLAGE

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ABSTRACT

Emergencies can happen to anyone, anytime and anywhere, while one of the emergencies that often occurs in the waters is drowning. A fisherman can experience drowning due to lack of preparation in going to sea. Deaths due to drowning can be prevented by providing first aid quickly and accurately. Drowning preparedness plays an important role in the anticipation and provision of first aid in the event of drowning. The purpose of this study was to determine the characteristics of fishermen and describe the preparedness of fishermen regarding first aid in the event of drowning (water rescue) on Labuhan beach, Antiga Village. This research is a descriptive study with an observational approach. The sampling technique used was purposive sampling in accordance with the inclusion and exclusion criteria, with a total of 67 respondents. Data collection was carried out by distributing questionnaires. The results showed that the characteristics of respondents had a bad drowning experience such as drowning, being hit by waves, falling off the boat, and being dragged by waves. The level of preparedness of the fishermen was in the ready category (52.2%), on four indicators of knowledge and attitude less ready (55.2%), emergency planning very ready (52.2%), disaster warning system less ready (46.3%), resource mobilization very ready (46.3%). The conclusion of this study is that the fishermen of Antiga Village consider that drowning deaths are common and drowning can occur to experienced fishermen. So that this is a problem for fishermen and the need to increase drowning preparedness. The suggestion of this research is that nursing institutions and government agencies can provide drowning prevention in the form of education and training to fishermen in order to increase the anticipation of drowning events.

KEYWORDS Drowning, first aid, fisherman, preparedness



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INTRODUCTION

Fishermen are a community group that has unique characteristics compared to other community groups, mainly because their activities focus on waters and marine resources as their main livelihood (Marasut et al., 2022). However, this profession has a high risk of emergencies such as drowning. Drowning itself is a critical event that can cause respiratory distress and lead to death if not treated immediately (Agustiawan, 2024). WHO data notes that more than 500,000 people die from drowning every year, while Indonesia is ranked third with a death rate of 4,518 people in 2023 (Wurjatmiko et al., 2020). Incidents like this show that drowning is a serious problem that requires more attention, especially among fishermen who operate in high-risk water areas (Hasanah, 2022).

Drowning emergencies among fishermen are often triggered by external factors such as ocean currents, high waves, and bad weather, as well as a lack of preparation and knowledge about first aid (Sari & Novrianto, 2020). This condition is exacerbated by the lack of awareness and preparedness in handling emergency situations. Reported drowning cases are often caused by the unpreparedness of victims and their colleagues in providing assistance, resulting in many lives lost or serious injuries (Elsi & Gusti, 2020). Therefore, improving the skills and knowledge of fishermen in terms of first aid in drowning cases is essential to minimize the risk of death and disability.

One of the efforts to reduce drowning deaths is through water rescue training, which is a water rescue technique that requires swimming skills and optimal physical readiness (BPBD, 2023). Water rescue is very important to be implemented among fishermen considering they are a group that is often exposed to risks in the water. However, the lack of training and socialization means that many fishermen lack basic skills in water rescue (Sumadewi et al., 2022). This is reflected in the low preparedness of coastal communities, such as in Antiga Village, which does not yet have a structured emergency assistance group or system in dealing with drowning events (Harahap & Usiono, 2023).

Research shows that preparedness in dealing with emergency situations is directly correlated with the level of knowledge, education, and experience of individuals (Permadani & Susilowati, 2022). People with higher levels of education and knowledge tend to have better preparedness in dealing with drowning events (Nizar *et al.*, 2023). However, most fishermen only rely on field experience with minimal formal skills related to first aid. Therefore, initiatives from the government and related institutions are needed to increase the capacity of fishermen in handling drowning cases through continuous training and counseling (Lanu et al., 2023).

In a preliminary study conducted at Labuhan Beach, Antiga Village, Karangasem, the majority of fishermen admitted that they did not have sufficient knowledge regarding first aid for drowning victims (Afdal et al., 2021). They often can only swim and help victims in the water, but are confused when the victim is already on land and unconscious. This highlights the importance of further research on the preparedness of fishermen in dealing with drowning emergencies (Atjo & Tetteng, 2024). Therefore, this study aims to explore the preparedness of fishermen in Labuhan Beach in providing first aid in the event of drowning, hoping to provide

a more comprehensive picture as well as a basis for recommendations to improve their capacity in handling emergency situations in the future.

This study aims to determine the preparedness of fishermen in providing first aid in the event of drowning (water rescue) at Labuhan Beach, Antiga Village. The formulation of the problem raised is how the description of fishermen's preparedness in dealing with the situation. Specifically, this study will identify respondents' characteristics such as age, education, experience, and emergency training, and describe their preparedness in dealing with drowning incidents. This study is expected to provide theoretical benefits by enriching knowledge on the preparedness of fishermen as bystanders in providing first aid, as well as a reference for future emergency studies. Practically, the results of this study are expected to increase the knowledge and preparedness of fishermen in dealing with drowning incidents, serve as a reference for future research, and be used by institutions for health promotion related to water emergencies.

RESEARCH METHOD

This study used a descriptive method with an observational approach to describe the preparedness of fishermen in providing first aid in the event of drowning at Labuhan Beach, Antiga Village (Rusandi, 2021). This design allows researchers to observe and measure variables without giving special treatment to respondents. Preparedness was measured through four indicators, namely knowledge and attitudes, emergency response planning, disaster warning systems, and resource mobilization. Data were collected through a questionnaire covering demographic aspects and fishermen's experiences, and then analyzed to provide an overview of fishermen's preparedness for emergencies on the water.

The study took place over six months from May to October 2024, with the main data collection conducted on September 19 and 20 at Tirta Segara Fishermen's Post, Labuhan Beach. This location was chosen due to its history of drowning cases and the large number of fishermen activities in the area. The research sample consisted of 67 fishermen, who were selected using purposive sampling technique based on inclusion and exclusion criteria (Notoatmodjo, 2012). Inclusion criteria included fishermen who live in Labuhan Beach, can read and write, and are willing to be respondents. Meanwhile, fishermen who were over 70 years old or ill were excluded from the study.

The research variables include fishermen's knowledge, education, and experience in dealing with drowning incidents. The operational definition of variables helps researchers measure preparedness with a clear scale, such as age in years, latest education, and bad experience at sea (Sugiyono, 2019). Scoring of the questionnaire was based on a Guttman scale, where a score of 80-100 indicates highly preparedness, and a score below 40 indicates unpreparedness. The validity and reliability of the instruments were tested through Pearson and Cronbach's Alpha tests, with the results showing high levels of validity and reliability (Sugiyono, 2017).

In the data collection process, each fisherman was asked to sign an informed consent to ensure their voluntary involvement. Ethical principles such as autonomy, beneficence, and justice were applied to protect the rights and welfare of

respondents during the study (Handayani, 2020). The collected data were processed through editing, coding, and tabulation using the SPSS program. Univariate analysis was conducted to describe the respondents' characteristics and their preparedness in the form of frequency distribution and central tendency.

The results of this study are expected to increase fishermen's understanding of the importance of preparedness in dealing with drowning events and contribute to health promotion in the field of emergency nursing (Saputra, 2020). In addition, this study is also expected to be a reference for further research and encourage the establishment of emergency training programs for fishermen, in order to minimize the risk of accidents on the water.

RESULT AND DISCUSSION

Research Results

The results of the study describe the condition of the research location, characteristics of respondents and the results of data analysis. Data collection was carried out on September 19, 2024 to September 20, 2024. The location of this data collection was carried out at Labuhan Beach, Antiga Village, Karangasem Regency. Respondents in this study are people who work as fishermen, especially those who live in Labuhan Beach, Antiga Village.

Research Site Conditions

Labuhan Beach is located in Antiga Village, Manggis District, Karangasem Regency which is the eastern part of Bali. Labuhan Beach is very wide in the bay area and borders Nusa Penida. The location boundaries in the study are the north of the beach bordering Nusa Penida, the east of the beach bordering Padang Bay bay, the south bordering the Labuhan road area, and the west of the beach bordering the Ulakan Village beach area to Tanah Ampo Village beach. Bad weather can cause this beach to experience strong wave currents that are very risky for drowning. This beach is often visited by outsiders to be used as a fishing spot, not only that but the people who live on the coast of Labuhan beach the majority of their work as fishermen. This beach does not have a *lifeguard* or better known as a *lifeguard* who will supervise the activities carried out by the community on Labuhan beach as a form of anticipation if there is a drowning emergency (Dispar Karangasem, 2019).

Judging from the daily activities of fishermen to fulfill their daily needs, it is very potential for unwanted events such as drowning. Accidents on the beach or emergency events can occur at any time, anywhere and anyone who can swim or can occur to fishermen who cannot swim. Many emergencies can occur on the beach such as cramps due to too long water activities, being swept away by sea waves, falling off the boat, and drowning which is often experienced by fishermen.

Based on the results of interviews with fishermen who are on Labuhan beach, Antiga Village, that when there is someone who has drowned, these fishermen can help the victim while in the water because the majority of residents can swim, but they say panic and confusion when the victim is already on land with the victim's condition unconscious, residents can only ask for help from *an ambulance*, the community, especially local fishermen, also said that they never brought emergency aid equipment such as buoys and life jackets if there was a drowning emergency.

Data Analysis Results

Data analysis in this study is in the form of univariate analysis used to describe the preparedness of fishermen regarding first aid for drowning at Labuhan beach, Antiga Village. The preparedness of fishermen will be measured using a questionnaire with four sub-variables, namely knowledge and attitudes, emergency planning, disaster warning systems, and resource mobilization. Data analysis in this study describes the characteristics of respondents based on age, gender, latest education, bad experience of being a fisherman, experience of witnessing a drowning incident, and experience of emergency training. The results of questionnaire data collection to fishermen totaling 67 fishermen at Labuhan beach, Antiga village, which was collected on September 19, 2024 to September 20, 2024, the researcher was assisted by two research assistants in collecting data from fishermen. The results of the analysis of the characteristics of respondents will be explained in the table below.

1. Characteristics of respondents based on age

Table 1. Central Tendency of Respondents' Characteristics by Age (n=67)

Variables	Median	Minimum	Maximum
Age	43	30	60

Table 1 shows that the largest age of respondents is at the age of 60 years, the least age of respondents in this study is at the age of 30 years, and the median age of respondents in this study is at the age of 43 years.

2. Characteristics of respondents based on gender, latest education, bad experience of being a fisherman, experience of witnessing drowning, experience of emergency training (skills).

Table 2. Frequency Distribution of Respondent Characteristics (n=67)

Variables	Category	Frequency	Percentage (%)
Gender	Male	67	100
	Female	0	0
Total		67	100
Last Education	Not in School	6	9.0
	SD	13	19.4
	SMP	18	26.8
	SMA/SMK	30	44.8
	Higher Education	0	0
Total		67	100
Bad Experience Being a Fisherman	Never drowned	1	1.5
	Hit by waves	45	67.2
	Falling off the ship	1	1.5
	Swept away by the waves	4	6.0
Total		51	76.2
Experience of witnessing a drowning incident	Ever	24	35.8
	No	43	64.2

Total			67	100
Emergency training Ever			34	50.7
experience (skills)		No	33	49.3
Total			67	100

Table 5.2 shows that fishermen on Labuhan beach are only male, totaling 67 people (100%). The most respondents according to the latest education level are SMA / SMK, totaling 30 people (44.8%). The majority of respondents with bad experiences as fishermen were hit by waves with a total of 45 people (67.2%). The experience of witnessing drowning events, the majority of respondents have never witnessed drowning events with a total of 43 people (64.2%). And the experience of emergency training, the majority of respondents have witnessed drowning with a total of 34 people (50.7%).

3. Research variables

Table .Error! No text of specified style in document.1 Fishermen's Preparedness Overview (n=67)

		Frequency	Percentag (%)	Average	Standard Deviation
Knowledge and	40-54 (Less prepared)	37	55.3	2.93	1.172
	55-64 (Almost ready)	9	13.4		
	65-79 (Ready)	10	14.9		
	80-100 (very well prepared)	11	16.4		
Planning	40-54 Less	6	9.0	4.27	0.947
	55-64 Almost	5	7.5		
	65-79	21	31.3		
	80-100 Very well	35	52.2		
Disaster Warning System	40-54 Less	31	46.3	3.01	1.121
	55-64 Almost	14	20.9		
	65-79	12	17.9		
	80-100 Very well	10	14.9		
Resource Mobilization	40-54 Less	15	22.4	3.90	1.220
	55-64 Almost	8	11.9		
	65-79	13	19.4		
	80-100 Very well	31	46.3		
Preparedness Level	40-54 Less	4	6.0	3.61	0.717
	55-64 Almost	23	34.3		
	65-79	35	52.2		
	80-100 Very well	5	7.5		

Table 5.3 shows that first aid preparedness in the event of drowning from knowledge and attitude indicators is in the less prepared category with a total of 37 fishermen (55.2%), the second indicator is in the very prepared category with a total of 35 fishermen (52.2%), the third indicator is in the less prepared category with a

total of 31 fishermen (46.3%), the fourth indicator is in the very prepared category with a total of 31 fishermen (46.3). The results showed that the level of preparedness of fishermen on Labuhan beach in Antiga Village was in the ready category with a total of 35 fishermen (52.2%).

Table 5.3 also shows that it can be concluded that the indicators that are still in the less prepared category are the first indicator with 37 people (55.2%), and the third indicator with 31 people (46.3%).

Table .Error! No text of specified style in document.2 Research sub-variables
Knowledge and attitude (n=67)

No.	Item Statement Knowledge and Attitude Indicators	Total Correct
1	Drowning can happen to anyone, including fishermen	98
2	Drowning can be caused by a lack of preparation such as warming up before going out to sea.	64
3	When drowning, water will enter the lungs and cause shortness of breath.	110
4	When going to sea, it is enough to prepare provisions and fishing gear	44
5	Secure the victim to a safer, shadier and flatter place if the victim can already be evacuated to the ground	100
6	Drowning deaths are commonplace at sea.	22
7	When drowning we must panic and act immediately	62
8	The goal of first aid in drowning is to prevent disability and death.	112
9	The first step of drowning aid is to immediately perform a heart-lung massage.	30
10	Taking medication before going to sea to prevent motion sickness	52
11	Consuming alcohol while at sea to keep warm	86
12	The 3 A principle needs to be applied when helping drowning victims, which includes personal safety, victim safety, and environmental safety.	102
13	An emergency event is one of the life-threatening events, where immediate action can be taken to prevent disability and death.	106
14	Provide as much drinking water as possible to the drowning victim.	96
15	A person's knowledge, education, and experience can influence the preparedness factor in helping a drowning incident.	108

Table 5.4 shows that the statement at point six, namely death by drowning is common in fishing. Point six is the lowest point or is often answered incorrectly by respondents. Fishermen think that death by drowning is a common thing in fishing, even though death by drowning is highly avoided by the community and is not a common thing. Fishermen are very at risk of drowning because their daily activities are in the water, so it is necessary to increase fishermen's knowledge in improving drowning preparedness.

Table .Error! No text of specified style in document.3 Emergency Planning Research Sub Variables (n=67)

No.	Item Statement Indicator Emergency Planning	Total Correct
1	The action you take if you find a drowning incident that is still in the water is to help retrieve the victim by throwing a rope or buoy.	120
2	If the victim is drowning and experiencing respiratory arrest, chest compressions can be performed or called Cardiopulmonary Resuscitation (CPR).	122
3	Fishermen are not required to attend training from Basarnas/medical personnel in first aid activities.	76
4	Anticipate drowning events by developing a plan for the fishermen's group	98
5	Waiting 10-15 minutes to render aid when the drowning victim is still in the sea	114
6	Not preparing/not knowing important numbers that can be contacted such as from the National Search and Rescue Agency and hospital ambulance.	100
7	Fishermen are required to have first aid skills	122
8	Mandatory skills for fishermen before going to sea are swimming before helping drowning victims	128
9	Not paying attention to consciousness, breathing, and pulse in rescuing drowning victims.	88
10	Exercise/Simulation conducted after a drowning incident	98
11	When a drowning victim experiences vomiting, it can lower the position of the head from the body.	110
12	Ensure that drowning victims do not have their tongues blocking the airway.	122
13	Emergency events can only occur in a hospital setting.	88
14	The helper should not jump into the water to perform the rescue.	52
15	Rescuing personal belongings first if a fellow fisherman drowns	114

Table 5.5 shows that the statement at point ten, namely training/simulation is carried out after a drowning incident. At point ten, it can be explained that a fisherman is still wrong in answering the training/simulation of drowning emergencies carried out after a drowning incident. Training and simulation of drowning countermeasures need to be done before there is a drowning incident and is a form of anticipation of drowning incidents. When they have received drowning training from the local BPBD or BNPB, at least the community and fishermen understand the actions that can be taken as a form of anticipation of drowning.

Table .Error! No text of specified style in document.4 Disaster warning system research sub-variables (n=67)

No.	Item Statement Disaster Warning System Indicator	Total Correct
1	Information related to wave currents and bad weather must be kept known by fishermen	80
2	Drowning in fishermen can happen even to experienced fishermen	56
3	When the weather is bad, fishing can still be done	116
4	Personal safety equipment such as life vests and live vests must be available.	102
5	First aid information can be obtained anywhere including social media (<i>hoax</i>)	32
6	Keeping referral numbers is not necessary when fishermen can provide first aid	74
7	Do not panic and immediately evacuate to a safe place is a form of fishermen preparedness efforts.	108
8	Setting up a rapid and integrated emergency information and communication system for fishermen groups	98
9	Providing a less rapid and appropriate response to the potential / threat of drowning events	62
10	High tides and bad weather did not affect the drowning incident.	74

Table 5.6 shows that point five, namely first aid information can be obtained anywhere including social media (*hoax*). Point five is the lowest point or is often answered incorrectly by respondents. Fishermen consider that first aid information can be obtained anywhere including social media (*hoax*). This is a problem because judging from the news circulating now, a lot of news is not true so fishermen or the public are expected to be wiser in choosing news. News about drowning emergencies can be seen in the information provided by the local government so that.

Table .Error! No text of specified style in document.5 Research sub-variables Resource Mobilization (n=67)

No.	Item Statement Resource Mobilization	Total Correct
1	Fishermen's groups are required to participate in emergency training	74
2	Request assistance from the fishermen's group if there is a drowning incident.	92
3	Not preparing life jackets and ropes for first aid in case of drowning.	134
4	The presence or absence of experience in helping drowning incidents can affect inappropriate / inappropriate handling in providing assistance.	102
5	Apply the results of the emergency training, especially the rescue techniques for drowning victims.	114
6	Selfishness when a fellow fisherman falls overboard	126

7	Only watch if there is a drowning incident	126
8	Preparing funds in case the drowning victim needs emergency medical treatment	38
9	Not cooperating with Basarnas, Puskesmas and Village Officials to facilitate all processes if there is a drowning incident.	88
10	Not preparing transportation facilities such as boats for evacuation in the event of a drowning incident	82

Table 5.7 shows that the statement in point nine, namely not cooperating with Basarnas, Puskesmas and Village Apparatus to facilitate all processes if there is a drowning incident. Fishermen think that fishermen do not need to cooperate with Basarnas, Puskesmas, and Village Officials, in this case fishermen do not understand how the flow of asking for help to the authorities. At least fishermen know the important numbers from Basarnas and the Hospital to facilitate assistance to drowning victims. It can also be said that the level of preparedness of fishermen in the first aid of drowning is still lacking, and it needs to be improved by the community and fishermen.

Discussion of Research Results

Respondent Characteristics

The results showed that the majority of respondents in this study were 45 years old, with the youngest age being 30 years old and the median age being 43 years old. This finding is in line with Tasya's research(2024) which shows that the majority of fishermen are between 20-60 years old. Age is an important factor in fishermen's preparedness, because the older a person is, the broader the mindset and maturity in making decisions, especially in dealing with emergencies (Baiq Ismiwati & Nadya Septiana K, 2022) . Older fishermen tend to be wiser in behavior and action, although physical factors and endurance can be an obstacle (Umar *et al.*, 2024) . Therefore, it is important to pay attention to preparedness education that suits all age groups so that the risk of drowning can be minimized.

In terms of gender, this study found that 100% of respondents were male, in accordance with the research of Gobel et al.(2020) which shows the dominance of men in the fishing profession. Male fishermen are more involved in fishing activities, while women usually help in processing and marketing the catch (Amalia *et al.*, 2021) . The work of fishermen is known to be heavy and high-risk, so it tends to be carried out by men who are physically stronger and resistant to extreme conditions at sea. In the context of emergencies, men are considered to be more responsive and ready to provide assistance in the event of an accident at sea.

The majority of fishermen in this study had the last education level of SMA/SMK (44.8%), in line with the 12-year compulsory education program implemented in Indonesia. This result supports Felianty Tongka's research (2024) which states that most fishermen have a high school education. Education level plays an important role in preparedness and decision-making ability in emergency situations (Waani & Kandowangko, 2019) . Higher education helps fishermen understand emergency information better and increases their preparedness in facing risks at sea (Rakhmawati & Setyaningsih, 2022) . Thus, education is a key factor in improving fishers' capacity to deal with various emergency situations.

Bad experience as a fisherman is also an important factor in preparedness. A total of 67.2% of respondents had experienced being hit by waves, while a small percentage had experienced incidents such as drowning, being dragged by waves or falling off the boat. These experiences provide valuable lessons that help fishers anticipate and prepare for similar events in the future (Gusti *et al.*, 2022) . Bad experiences encourage fishers to be more careful, prepare safety equipment, and be more alert in dealing with emergencies at sea (Aurelia *et al.* .., 2022)

A total of 64.2% of respondents have never witnessed a drowning incident directly, while 35.8% have experienced it. The experience of witnessing a drowning incident can improve understanding and skills in providing first aid (Basyit *et al.*, 2020) . Fishermen who have witnessed a drowning incident tend to be better prepared to handle similar incidents than those who do not have such experience. This experience is an important factor in preparedness, as it provides a real picture of the importance of a quick and appropriate response in emergency situations.

A total of 50% of respondents had participated in emergency training, while 49.3% had not. This training is very important in equipping fishermen with basic skills in handling accidents at sea (Wirawati & Nuraini, 2024) . Fishermen with training experience tend to be calmer and more skillful in dealing with emergency situations, while those without training tend to panic and get confused. Therefore, emergency training for fishermen should be improved to minimize the risk of accidents at sea and improve their safety in carrying out their profession.

Research Variables

Based on data collection on respondents on Labuhan beach, Antiga Village with 67 respondents. So, the fishermen's preparedness variables assessed in this study, based on the fishermen's preparedness description questionnaire about first aid in the event of drowning (*water rescue*) which includes four preparedness indicators such as knowledge and attitudes, emergency planning, disaster warning systems, and resource mobilization. The measurement parameters used in this study are the categories of not ready (0-39), less ready (40-54), almost ready (55-64), ready (65-79), very ready (80-100).

The results showed that the preparedness of fishermen at Labuhan Beach, Antiga Village in providing first aid in the event of drowning was assessed through four main indicators: knowledge and attitude, emergency planning, disaster warning system, and resource mobilization. Of the 67 respondents involved, the majority of fishermen had varying levels of preparedness, with the results showing that 52.2% were in the prepared category. However, the knowledge and attitude aspects are still classified as less prepared (55.2%) which reflects the low awareness of fishermen about the importance of first aid when drowning (Elsi *et al.*, 2020) . This minimal level of understanding is influenced by education, age, and inadequate experience in dealing with emergency situations.

The emergency planning indicator showed positive results with 52.2% of fishers in the very prepared category. This reflects their awareness in preparing safety equipment such as life jackets and checking the condition of the boat before going to sea (Mayzarah & Batmomolin, 2021) . Emergency response plans also involve fishermen's readiness in knowing important contact numbers, such as

Basarnas and the nearest health workers. However, some fishermen still mistakenly understand that emergency simulations need to be conducted before an incident occurs, not after. This awareness is crucial to prevent drowning incidents that lead to fatal accidents.

Meanwhile, the disaster warning system indicator still shows shortcomings, with 46.3% of fishermen in the underprepared category. Many fishermen mistakenly believe information from social media that is not necessarily valid, causing a lack of awareness of weather and wave warnings (*Wahyuni et al.*, 2024). In fact, understanding the weather and waves before going to sea is crucial in reducing the risk of drowning (Yunus. A, 2023). To improve preparedness, fishermen need to obtain correct and accurate information from trusted sources such as BMKG, BNPB, and Basarnas in order to minimize risks while at sea.

On the other hand, the resource mobilization indicator shows quite good results, with 46.3% of fishermen classified as very prepared. However, some fishermen have not collaborated with Basarnas or village officials to facilitate emergency handling (Caesario et al., 2023). Collaboration with related parties is essential to speed up response in the event of a drowning incident, while ensuring the availability of safety facilities and infrastructure. With this synergy, fishermen's preparedness in dealing with emergencies at sea can be significantly improved (*Siregar et al.* .., 2023)

Overall, the level of preparedness of fishermen at Labuhan Beach, Antiga Village in providing first aid in the event of drowning is in the moderate category, with the need for improvement in the aspects of knowledge and disaster warning systems (Mansyah & Valentino, 2022). Factors such as age, education, and experience greatly influence the preparedness of fishermen (Wijaya & Lestari, 2019). Therefore, continuous education, training, and simulation are needed to improve fishermen's skills in providing first aid when facing a drowning incident. Fast and precise first aid is crucial in saving lives and preventing the victim's condition from worsening (Harahap & Usiono, 2023).

Research Limitations

The limitation in this study is that the number of questionnaire statements is too large, which makes respondents feel bored in filling out the questionnaire. This can be seen directly by the researcher that the respondents said the statements in this research questionnaire were too many. So that there are answers that are just answered by respondents and the results may be less accurate.

CONCLUSION

The results of research conducted in September 2024 at Labuhan Beach, Antiga Village, showed that the majority of respondents were fishermen aged 45 years with a median age of 43 years, and all were male (100%). Most had a high school education (44.8%) and bad experiences at sea, such as being hit by waves (53.7%). Although only a few fishermen had experienced incidents such as drowning or being swept away by waves, 64.2% of respondents had witnessed a drowning incident. Emergency training was attended by half of the total respondents (50%), while 49.3% had never attended such training. In terms of

preparedness, fishermen in Labuhan Beach showed varied readiness. Their knowledge and attitude were in the less prepared category (55.3%), while emergency planning showed a very prepared level (52.2%). In terms of disaster warning system, 46.3% of fishermen were in the less prepared category, while resource mobilization showed high preparedness in 46.3% of respondents. Overall, the level of preparedness of fishermen in providing first aid in the event of drowning was in the prepared category with 52.2% of respondents indicating such readiness.

As a follow-up, fishermen are expected to be more proactive in seeking information and improving their skills in managing drowning emergencies, especially in the aspects of knowledge, warning systems, and emergency response. Nursing education institutions can utilize the results of this study to strengthen the emergency nursing and tourism nursing curriculum, with an emphasis on water rescue training in fishing communities. Emergency agencies such as BPBD and the Health Office are expected to use these findings as a basis for policy in providing training and procurement of rescue facilities for fishermen in Labuhan Beach. In addition, this study can serve as a reference for future researchers to explore the social, economic and cultural factors that influence fishermen's preparedness and identify practical steps that can be taken in dealing with drowning situations.

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