



DESCRIPTION OF PUBLIC KNOWLEDGE OF THE ISLAND REGION IN MANAGING EMERGENCY RESULTING FROM VENOMOUS SEA ANIMALS

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ABSTRACT

The Riau Archipelago has a coral reef ecosystem with a diversity of marine life so that it has the potential to develop marine tourism areas and the livelihoods of the community in general are fishermen, one of which is Bintan Island. Some of the marine life in Bintan Regency are venomous marine animals that can attack humans. The sting of a venomous marine animal is an emergency condition that can be life threatening. The purpose of this study was to describe the knowledge of the people of the archipelago in handling emergencies due to venomous marine animal stings. This type of research is quantitative and the research design used is simple descriptive ie data collection is done at one time. The sampling technique used is *non-probability sampling*, namely *convenience* or *accidental sampling*. Data were collected by distributing questionnaires and direct interviews. Data analysis using Univariate Analysis. The results of this study indicate that the description of the level of public knowledge about venomous marine animal stings is seen based on the level of age, sex, education, occupation, income, sources of information and knowledge. Supported by the level of community knowledge in the sufficient category, as many as 36 people (73.5 %). The results of the study concluded that the higher a person's level of knowledge, the more alert and careful of venomous marine animal stings.

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1. INTRODUCTION (10 PT)

Indonesia is the largest archipelagic country in the world and has great marine and fishery potential (Directorate General of Marine Space Management, 2020). Riau Islands Province has an area of 251,810 km² of which 96% is ocean. The Riau Archipelago has a coral reef ecosystem with a diversity of marine life so that it has the potential to develop marine tourism areas and the livelihoods of the community in general are fishermen, one of which is Bintan Island. In addition, the tribes that are widely found in Bintan Regency are the Malays who live on the sea coast [1].

Sea tribes live and move around in remote island groups as nomads in the Riau Archipelago. Marine tribal communities can survive and carry out cultural practices in the form of indigenous knowledge and those that contain science in the form of knowledge, magic and science that are interrelated, including in the treatment of animal stings [2]. Some of the marine life in Bintan Regency are venomous marine animals that can attack humans. The sting of a venomous marine animal is an emergency condition that can be life threatening [3]. Based on data from the Thousand Islands Hospital, it was found that the most common causes of stings were lepu fish (50%), jellyfish stings (25%), and the rest were stings from stingrays, sea urchins, nineg fish, and sea snakes [4]. Based on the introduction conducted at the Kawal Health Center, Bintan Regency, the incidence of venomous sea animal stings in a month was 3-4 events [5].

Research conducted by Remigante, Costa, Morabito, La Spada, Marino, & Dossena, (2018) regarding the first aid options for scyphozoa venom stings is to rinse the sting area with vinegar (5% acetic acid), apply warm compresses/soaking with warm water. the sting area, and administer lidocaine. While the preliminary study that the

researchers conducted on 2 people living in the Berakit Coastal Village (Orang Laut), Bintan Regency, it was found that usually the victims of the sting of the Sembilang fish or the lepu fish were given antidote water from leaves and readings. In addition, it was also found that there were still deaths due to lionfish stings in children in the area which resulted in death [6].

This shows that there is still the use of alternative therapies in the treatment of venomous marine animal stings. In an emergency condition like this, it is important to take appropriate nursing actions, so that there is no more severe impact, disability and even death. For this reason, it is necessary to dig deeper in order to see a picture of the experience of the marine tribal community regarding the handling of emergencies due to venomous marine animal stings on the coast of Bintan Regency, Riau Islands. This is related to the role of nurses in carrying out nursing care in a holistic and sustainable manner, and not only focusing on curative actions, but still paying attention to promotive, preventive, and rehabilitative actions [7]. The purpose of this study is to describe the knowledge of the island community in handling emergencies due to venomous marine animal stings in the Riau Islands.

2. RESEARCH METHOD (10 PT)

This type of research is quantitative and the research design used is simple descriptive. The location of this research was carried out in Berakit Village, the working area of the Berakit Health Center, Bintan, Riau Islands. The research was conducted for 8 months, from April to November. The population in today's research is people who are in the work area of the Kawal Health Center, so the sample in this study is 49 people. The inclusion criteria for this study were 1). Willing to be a respondent, 2). Is a community, 3). Lives in Berakit village, the work area of Puskesmas Kawal. The sampling technique used is *non-probability sampling*, namely **convenience** or **accidental sampling**. Data collection in this study was carried out using a survey/direct interview to respondents using a questionnaire that had been tested for validity. The data has been collected through questionnaires and direct interviews.

3. RESULTS AND ANALYSIS

In this section, it is explained the results of research and at the same time is given the comprehensive discussion. Results can be presented in figures, graphs, tables and others that make the reader understand easily [2, 5]. The discussion can be made in several sub-chapters.

3.1. Characteristics of Respondents

Table 1.1. Characteristics of Respondents

No	Variable	Respondent	
		Amount	Percentage
Age			
1	20 – 30 years	4	8.2
2	31 – 40 years	11	22.4
3	41 – 50 years	17	34.7
4	> 50 years	17	34.7
Gender			
1	Man	28	57.1
2	Woman	21	42.9
Education			
1	UNEDUCATED	12	24.5
2	PRIMARY SCHOOL	25	51.0
3	JUNIOR HIGH SCHOOL	10	20.4
4	SENIOR HIGH SCHOOL	2	4.1
Income (Rp)			
1	< 1,283 000	40	81.6
2	> 1,283,000	9	18.4

Based on the results of the frequency distribution, it shows that the frequency distribution of respondents based on age is the age range of 41-50 years, namely 17 people (34.7%) and > 50 years old, namely 17 people (34.7%). According to research (Cahyono, 1998). The productive age ranges from 15-64 years which is the ideal age for workers. In the productive period, in general, as you age, your income will increase, which also depends on the type of work you do. A person's physical strength to carry out activities is very closely related to age because when a person's age



has passed the productive period, his physical strength decreases so that his productivity decreases and income also decreases, meaning that respondents at that age are willing and take the time to become respondents. [8] .

Based on the table, it shows that the frequency distribution of respondents based on gender is 28 men (57.1%), compared to 21 women (42.9%). This shows that the research respondents are male as a more dominant proportion than women due to the type of work that demands physical and security guarantees.

Based on the frequency of respondents, the highest education level is primary school , which is 25 people (51.0 %) . The majority of respondents have a low level of education due to a simple economy and lack of awareness about the importance of education so that people only take primary education. This is in line with research (Ardhany, Anugerah, & Harum, 2016) where the majority of respondents are from the primary education level as many as 75 people (65.2%) [9] .

3.2. Respondent Knowledge

Table 1.2. Characteristics of Respondents regarding Emergency Management Due to Venomous Sea Animal Sting

No	Knowledge	Respondent	
		Amount	Percentage
1	Good category	13	26.5
2	Enough category	36	73.5
3	Less category	-	-
	Amount	49	100 %

The knowledge of many respondents in the sufficient category is as many as 36 people (73.5 %) . This is different from existing research, that the higher the level of education of a person, the easier it is to receive information so that the more experience one has, the more knowledge one has, otherwise the less education will hinder the development of one's attitude towards the new values introduced. Thus it can be concluded that the knowledge received by respondents with low and moderate education and does not rule out the possibility for those with higher education, comes from the surrounding environment. [9] .

4. CONCLUSION

Most of the people are in the age group 41 -50 and > 50 years with a total of 17 people (34.7%) with the majority of the household level of education being elementary education as many as 25 people (42.9%), male gender as many as 28 people (57 people). ,1%) and 21 women (35%). Based on the level of occupation, the frequency distribution of respondents with the highest number of unemployed is 24 people (49.0%). While the frequency distribution of respondents based on income level is the most that is <1,283,000 as many as 40 people (81.6%). Sources of information obtained by the public are generally obtained through parents and relatives, namely 16 people (32.7%), while the least is through print media and others, namely 1 person (2.0%). Supported by the level of community knowledge in the sufficient category as many as 36 people (73.5%). The results of this study indicate that the description of the level of public knowledge about venomous marine animal stings is seen based on the level of age, sex, education, occupation, income, sources of information and knowledge.

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