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THE RELATIONSHIP OF RIVER WATER USE BEHAVIOR WITH THE OCCURENCE OF DIARROW DISEASES IN GAMPONG DAH, RUNDING DISTRICT, SUBULUSSALAM CITY IN 2021

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ABSTRACT

The background A river is a form of the aquatic ecosystem which has an important role in the hydrological cycle. decrease in river quality if the water can not be used accoerding to the water river quality. The utilization of river water has decreased its quality due to contamination causing health problems as diarrhea. The purpose of this study is to know the relationship between the dhearea of river water use on the of occurence diarrheal diseases in Gampong Dah Subdistrict Runding Subulussalam.This research is analytic descriptive with a crossectional design with 65 samples and the sampling technique is done by Random Sampling. The study was conducted from 12 to 16 June 2017 in Gampong Dah subdistrict Runding Subulusalam city. Data analysis was done by chi-square statistical test (x2).The result of this research shows that there is a correlation between knowledge, attitude, and action with diarrhea disease in Gampong Dah Subdistrict Runding Subulussalam with p <0,05.The result of data analysis by using the Chi-square test proved that knowledge, attitude, and action relate to diarrhea disease in Gampong Dah Sub Runding Subulussalam. With p-value for knowledge is 0,017, attitude with p-value 0,044 and action with p-value 0,026. It is expected that communities should limit the use of river water to meet daily needs such as brushing, bathing, and cooking and switch to using dug well water as a source of clean water to meet daily needs.

Keywords: Behavior, Use of River Water, Diarrhea Disease

Introduction

Water is a natural resource that is needed for the livelihood of many people and even by all living things. Therefore, these water resources must be protected so that they can still be used properly by humans and other living things. The use of water for various purposes must be done wisely by taking into account the interests of current and future generations.[1]

According to Suwondo et al., a river is a form of aquatic ecosystem that has an important role in the hydrological cycle and functions as a catchment area for the surrounding area. The river water environment consists of abiotic and biotic components that interact with each other through the flow of energy and nutrients. If the interaction between the two is disturbed, there will be changes that cause the aquatic ecosystem to become unbalanced.[2]

In Indonesia, 119 million people do not have access to clean water, only 20 percent of most urban areas, while 82 percent of Indonesian people consume water that is not suitable for health. According to the world body that regulates water issues, the World Water Assessment Programme, the water crisis has had a devastating impact and created epidemics of diseases, especially skin diseases. 60 percent of rivers in Indonesia are polluted, ranging from organic matter to coliform and fecal Coli bacteria.[3]

Diarrhea is an endemic disease in Indonesia and is also a potential disease outbreak which is often accompanied by death. In 2015 there were 18 outbreaks of diarrhea spread across 11 provinces, 18 districts/cities, with 1,213 patients and 30 deaths (CFR 2.47%).[4]

The estimated cases of diarrhea in Aceh in 2015 were 205,580 cases, while the number of cases found and treated was 103,690 cases or 50.4 percent of diarrhea cases in Aceh by district/city9. In the city of Banda Aceh, it is known that the incidence of diarrhea in 2014 was 1,393 cases (13.7%). In 2015 from January to October there were 918 cases of diarrhea.[5]

In Dah village, Runding sub-district, Subulussalam city, there is a very wide river whose flow comes from Runding village to Dah village, so that the water that flows mainly in Dah village is used by local residents for daily needs. This was done by the residents because some of the gampong community of Dah, Runding sub-district, did not have their own wells. So for the problem of daily needs using river water, so far there are many problems that arise from river water such as people's habits of throwing garbage into the river, washing clothes, cooking and washing dishes. Besides that, the river is also used for bathing and latrines, so the water flowing to other areas makes some residents experience various disease problems.[6]

Methods

This research is descriptive-analytic with a cross-sectional design, namely looking at the relationship between river water use behavior and diarrheal diseases in Gampong Dah, Rounding sub-district, Subulusalam city in 2017. The population in this study were all houses in the Gampong Dah river basin, Runding sub-district, Subulusalam city, which amounted to 189 houses.[7] The sampling technique in this study was carried out using the random sampling method. After calculating using the formula, the sample size was obtained as much as 65.39 rounded up to 65 houses. Each house represents 1 sample as a respondent in the study so that the total number of respondents is 65 people. The research was conducted in Gampong Dah, Rounding sub - district, Subulusalam city from 12 to 16 June 2017. Types of Data and Methods of Data Collection. Primary data, can be obtained from the results of the collection using questionnaires, interviews, observations and check lists. Questionnaires are direct interviews using questions and answers in a list of questions in the form of forms to get responses, answers, information and so on. Observation is to make direct observations at the research site. Interview or interview, namely direct investigation by holding questions and answers. Secondary data can be obtained from the library, namely reading books on lecture materials related to research. Information taken on the internet at the sub-district health center.

Result and Discussion

Based on administrative data from the Gampong Dah government, Runding District, Subulussalam City, the number of Heads of Families (KK) is 189 families. With details of 112 men, while 77 women'.

Distribution of Diarrhea in Respondents in Gampong Dah, Runding District, Subulussalam City in 2021

No	Diarrhea	F	%
1	There is	36	55,4
2	There isn't any	29	44,6
	Amount	65	100%

Based on Table, it can be seen that from 65 respondents, the number of respondents who experienced diarrhea was more (55.4%) than respondents who did not experience diarrhea (44.6%).

The Relationship between Knowledge of River Water Use and the Occurrence of Diarrhea in Gampong Dah, Runding District, Subulussalam City in 2021

No	Knowlage	Occurrence of Diarrhea				Total	%	Score *P*
		There is		There isn't any				
		f	%	f	%			
1	Well	17	26,2	23	35,4	40	61,5	0,017
2	Not good	19	29,2	6	9,2	25	38,5	
	Total	36	55,4	29	44,6	65	100	

The statistical test data (Chi-square) obtained a p-value of 0.017 < (0.05) so that it is known that there is a relationship between knowledge of river water use and the occurrence of diarrheal disease in Gampong Dah, Rounding District, Subulussalam City in 2021.

The Relationship of Attitudes to Use of River Water with the Occurrence of Diarrhea in Gampong Dah, Runding District, Subulussalam City in 2017

No	Attitude	Occurrence of Diarrhea				Total	%	Score *P*
		There is		There isn't any				
		f	%	f	%			
1	positive	16	24,6	21	32,3	37	56,9	0,044
2	negative	20	30,8	8	12,3	28	43,1	
	Total	36	55,4	29	44,6	65	100	

The data from the statistical test (Chi-square) obtained a p-value of 0.044 < (0.05) so it is known that there is a relationship between the attitude toward using river water and the occurrence of diarrheal disease in Gampong Dah, Runding District, Subulussalam City in 2021.

The Relationship of River Water Use Actions With The Occurrence Diarrheal Disease in Village Dah, Runding District Subulussalam City 2021

No	Action	Occurrence of Diarrhea				Total	%	Score *P*
		There is		There isn't any				
		f	%	f	%			
1	positive	15	23,1	21	32,3	36	55,4	0,26
2	negative	21	32,3	8	12,3	29	44,6	
	Total	36	55,4	29	44,6	65	100	

The data from the statistical test (Chi-square) obtained a p-value of 0.026 < (0.05) so that it is known that there is a relationship between the use of river water and the occurrence of diarrheal disease in Gampong Dah, Runding District, Subulussalam City in 2021.

Based on the research that has been done, it is known that there is a relationship between knowledge of river water use and the occurrence of diarrheal disease in Gampong Dah, Runding District, Subulussalam City in 2017 with a p-value of 0.017 < (0.05). 38.5% of . Respondents had poor knowledge, there were 29.2% had diarrhea and 9.2% did not experience diarrhea.

Based on the research that has been carried out, it is known that there is a relationship between the attitude toward using river water and the occurrence of diarrheal disease in Gampong Dah, Runding District, Subulussalam City in 2017 with a p-value of 0.044 < (0.05). Of the 43.1% of respondents who had a negative attitude, there were 30.8% had diarrhea, and 12.3% did not experience diarrhea.

Based on the research that has been done, it is known that there is a relationship between the use of river water and the occurrence of diarrheal disease in Gampong Dah, Runding District, Subulussalam City in 2017 with a p-value of 0.026. Of the 44.6% of respondents who took unfavorable actions, there were 32.3% had diarrhea, and 12.3% did not experience diarrhea.

Conclusion

More respondents with good knowledge (61.5%) than those with less good knowledge (38.5%) so that it can be concluded that there is a relationship between knowledge of river water use and the occurrence of diarrheal disease with a p-value of 0.017. There is a relationship between knowledge and the occurrence of diarrhea in respondents because the number of respondents who have poor knowledge suffer from diarrhea more than respondents who have good knowledge of the use of river water sources in meeting their daily needs.

Respondents who have a positive attitude are more (56.9%) than negative respondents (43.1%) so there is a relationship between the attitude toward using river water and the occurrence of diarrheal disease with a p-value of 0.044. The existence of a relationship between attitudes and the occurrence of diarrhea in respondents is influenced by poor knowledge so that respondents who have a negative attitude are more likely to suffer from diarrhea than respondents who are positive and have good knowledge of the use of river water sources.

Respondents who took good actions in using river water were more (55.4%) than those who were not good (44.6%) so there was a relationship between actions using river water and the occurrence of diarrheal disease with a p-value of 0.026. Actions in the use of river water are related to the occurrence of diarrhea in respondents because respondents use river water without processing and use it thoroughly to meet needs that can cause diarrheal disease.

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