Overview Of The Level Of Knowledge About Preparedness To Face Flood Disasters In Joyontakan District, Kratonan Surakarta Public Health Center (Puskesmas) Working Area

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Erika Dewi Noorratri Email: erika@aiska-university.ac.id **Keywords :** Disasters, floods, preparedness, knowledge	A disaster is an occurrence that cannot be predicted when it will occur and can cause injuries or lives, as well as result in damage and loss. Preparedness efforts in facing disasters must be increased to reduce the risk and impact of disasters. One of the factors in disaster preparedness is the level of knowledge. Knowledge is one of the main factors and is the key to preparedness for facing disasters. The knowledge a person has can usually influence attitudes and concern for preparedness in anticipating a disaster. Method: quantitative with descriptive research methods, the total sample was 53 people, in May 2024 in RT.02 RW.01 Joyontakan Village, Surakarta City. The sampling technique used total sampling. Results: An overview of the level of community knowledge in RT.02 RW 01, Joyontakan Subdistrict, Surakarta City showed that the majority of the good knowledge level was 57%. Discussion: The community will have good knowledge that can be obtained from the experience of experiencing flood disasters in their area. This experience can provide additional knowledge for residents of areas that are prone to flood disasters. The flood disaster that has been experienced by residents has influenced the community's attitude and concern to be ready and ready to anticipate when a flood disaster occurs.

INTRODUCTION

A disaster is an occurrence or a series of occurrences that can occur suddenly or unplanned, slowly and continuously, which can have an impact on a normal pattern of life or damage that requires emergency and extraordinary action to help and save the disaster victims, both humans and victims in their environment (Widya Fuji Astuti Sianu, Pipin Yunus 2023). Natural disasters can occur suddenly or in a slow process (Prayuda Saputra et al, 2020). A disaster is an occurrence that cannot be predicted when it will occur and can cause injuries or lives, as well as result in damage and loss. Disasters are a series of occurrences that threaten and disrupt people's lives and livelihoods caused by both natural and/or non-natural factors and human factors, resulting in loss of life, environmental damage, loss of property, and psychological impacts (Danil, 2021).

Based on information obtained from the National Agency for Disaster Management (BNPB), data shows that in the year 2023, 4,852 disaster incidents were recorded in all provinces of Indonesia, one of which was flooding. as many as 1,117 incidents. Based on data from the National Disaster Management Agency (BNPB) in 2023, Central Java experienced a total of 580 disaster occurrences. The details cover 92 flood incidents, 156 extreme weather incidents, 122 landslides, 176 forest and land fires, 31 droughts, and 1 volcanic eruption. It was also reported that there were natural events and disasters in Indonesian territory collected by Pusdalops BNPB occurred flooding in the Sukoharjo area on Saturday, 18 February 2023 at

07.00 WIB until Sunday, 19 February 2023 at 07.00 WIB(Kalaks BPBD Prov. Jateng Bpk. Bergas 2. 2023)

The types of disasters that often occur in Joyontakan Village, Surakarta City include floods, fires, and tornadoes. Fire and tornado disasters rarely occur, but flood disasters have occurred and caused many problems in the environment and loss of property and belongings for the local community.

Efforts to prepare for disasters involve several parties, for example, main stakeholders such as individuals, households, and the government. Apart from the main stakeholders, there is also a need for supporting stakeholders. Supporting stakeholders such as community institutions include (the Family Welfare Programme (PKK), Youth Organization (Karangtaruna), Islamic Forum (Majlis Taklim), etc.). Individuals and households are considered key elements who are not only subjects but also objects of preparedness that directly influence the existence of disaster risk. Disaster risks can impact vulnerable groups. Vulnerable groups at higher risk from disaster impacts are children, women, the elderly, and disabled people (Afik et al, 2021). Preparedness efforts in facing disasters must be increased to reduce the risk and impact of disasters. One of the factors in disaster preparedness is the level of knowledge. Knowledge is one of the main factors and is the key to disaster preparedness. The knowledge that a person has can usually influence attitudes and concern for preparedness in anticipating disasters ((Jahirin et al, 2021). Community knowledge of disaster preparedness is very important in local management strategies. This is because if a disaster occurs, the community is ready to carry out disaster management strategies that have been provided beforehand.

The public has low knowledge about floods or types of floods because it can be influenced by the lack of public education or the lack of socialization about a disaster that can be carried out by an agency or government, which can cause the community to not understand in detail the types of flood incidents.

Most of the public's level of knowledge at the research site was obtained from social media or the internet. The community's interest or enthusiasm in participating in counseling or socialization is the cause of the level of community knowledge. Some people follow the counseling or socialization from the government but do not listen properly to the speaker. They ignore counseling or socialization because they feel more experienced toward the flood disasters they experience anytime (Mas'Ula et al, 2019).

Preliminary studies obtained data that in 2023 Joyontakan Village experienced quite severe flooding which inundated several areas and had an impact on the community in their daily activities. Based on an interview with one of the Health cadres in Joyonta Village, the flood incident at that time caused both material and non-material losses. Apart from that, it also makes residents of various ages experience anxiety and worry about the impacts experienced by residents. Citizens' knowledge of flood preparedness needs to be improved on how to deal with flood disasters. Based on the background above, the researcher intends to conduct a research "Overview of the level of knowledge about preparedness to face flood disasters in Joyontakan District, Kratonan Surakarta Public Health Center (Puskesmas) working area"

RESEARCH METHODS

The type of research used was quantitative with descriptive research methods. This research examines the overview of the level of community knowledge regarding preparedness for flood disasters in Joyontakan Village, Kratonan Surakarta Public Health Center Working

Area. The research variable in this study was the level of community knowledge about preparedness for flood disasters. The population in this study were residents of RT.02 RW.01 Joyontakan Village. The number was 53 people in May 2024. The sampling technique was carried out using total sampling, namely 53 people. This technique was taken because the number of residents in RT.02 RW.01 who were over 17 years old was 53. So if it used a formula it will reduce the number of samples. The inclusion criteria used were residents in RT.02 RW.01 Joyontakan Subdistrict, residents who could read and write, residents who could communicate, and residents who were physically and mentally healthy. The demographic characteristics of residents used were gender and age. These two characteristics were used because they can also influence a person's level of knowledge.

This research uses an instrument in the form of a questionnaire regarding knowledge of flood disaster preparedness. The knowledge variable instrument contains sub-variables understanding knowledge, understanding of preparedness, the impact of flood disasters, potential losses caused by flood disasters, and the purpose of preparedness plans. This knowledge instrument was valid from 10 question items with a calculated r value of 0.463 to 0.684 > r table (0.361). So the validity test was valid on the 10 questions used for the research. The reliability test obtained 10 valid items with a cross alpha value of 0.707 > 0.6, so it can be concluded that the 10 knowledge question items are reliable so they are suitable for use as research instruments. The types of questions were multiple choices with true or false options.

This research was carried out in Joyontakan Village, Kratonan Health Center Working Area, Surakarta City. Carried out in May 2024. The data analysis method used in this research was the univariate method in the form of descriptive percentages. Research ethics in this study included informed consent, anonymity, and confidentiality.

RESULTS

Based on Table 1.1, the results show that of the 53 residents of RT.02 RW.01 Joyontakan Village, 30 people or a percentage of 57% were in a good category, 18 people were in the sufficient category, or 34%, and 5 people were in the poor category or 9%. This level of knowledge is categorized as good if 76%-100% of the total questions are correct, fair if the score is 56%-75% of the total questions correct, and poor if the score is <55% of the total questions correct. From the calculation results, it was found that the majority of residents had a good level of knowledge 30 people or 57%. Based on the results of data analysis using descriptive statistics, the knowledge level of RT.02 RW.01 Joyonta Village obtained the following results:

Table 1.1
Frequency Distribution of Residents' Knowledge in RT.02 RW.01 Joyontakan Village

Variable	Category	Frequency	%
Knowledge Level	Good	30	57 %
	Enough	18	34 %
	Less	5	9 %
Total		53	100 %

Source: Primary data processed in 2024

Based on table 1.2, shows that the maximum value of knowledge level was 100 and the minimum value was 40 from 53 people. Meanwhile, the average value was 78.8679 and the standard deviation value was 15.89150. This shows that the level of knowledge of the residents of Joyontakan Village, Surakarta City is in the average range of 79 and shows a level of knowledge in the good category.

Tabel 1.2
Deskriptive Statistics

	N	Minimum	Maximum	Mean	Std.Deviation
Knowledge Level	53	40.00	100.00	78.8679	15.89150

Source: SPSS data processed in 2024

Based on table 1.3, shows that the gender of the residents of RT 02 RW 01, Joyontakan Subdistrict, Surakarta City, was mostly 33 men, or 62%, and 20 women, or 38%. Based on table 1.4, shows that the majority of residents in RT 02 RW 01, Joyontakan Village, Surakarta City were young adults, 27 people, or 50%, 19 older adults, or 36%, and 7 elderly people, or 13%.

Table 1.3
Frequensy Distribution of Gender in in RT.02 RW.01 Joyontakan Village

Variable	Category	Frequency	%
Gender	Mn	33	62 %
	Woman	20	38 %
Total		53	100 %

Source: Primary data processed in 2024

Table 1.4
Frequensy Distribution of Age in in RT.02 RW.01 Joyontakan Village

Variable	Category	Frequency	%
Age	Young Adult	27	51 %
	Old Adults	19	36 %
	Elderly	7	13 %
Total		53	100 %

Source: Primary data processed in 2024

DISCUSSION

The research results show that the majority of residents of RT.02 RW 01 had a good level of knowledge worth 57%. Other people's research, shows that out of 76 respondents, 65 respondents have good knowledge (Vegita D. Imran, *et al.* 2023). The community will have good knowledge that can be obtained from the experience of experiencing flood disasters in their area. This experience can provide additional knowledge for residents of areas that are prone to flood disasters. The flood disaster that residents have experienced has influenced the community's attitude and concern to be ready and ready to anticipate when a flood disaster occurs (Zuliani and Hariyanto 2021). Other research results also show that in disaster mitigation, community knowledge after floods is in the high category. The majority of the

community considers flood disasters as a habit that occurs routinely every rainy season. This is considered a regular flood because it is a habit that is thought to have occurred over a long period (Gustini, Subandi, and Oktarina 2021).

The community will have additional knowledge if they are given health education, one of which is. This is if the community before being given counseling has a good level of knowledge and after counseling will have good knowledge. By the research results, showed that 36 respondents (87.8%) before being given counseling had a good level of knowledge (Prasetyo and Tjahjono 2021). The results of other research also showed that there will be an increase in the quality of knowledge in the community after providing counseling. Disasters or flood problems need to be addressed by the community by providing education in the form of education including understanding, knowledge, preparedness, and skills to prevent, anticipate, and have an early detection of disaster-prone areas. The results of other research regarding the level of knowledge showed that respondents who had sufficient or insufficient knowledge required action to be taken to increase their knowledge of respondents (Rohimah *et al*, 2021).

The level of public knowledge regarding preparedness in facing flood disasters in the high category was also obtained from research results in the Bukit Duri sub-district area, South Jakarta, at 84.7%. This shows a high percentage of knowledge level because it was obtained from the experience of the community or respondents who live permanently in Bukit Duri, South Jakarta over a fairly long period. Apart from that, this also indicates that experience influences a person's level of knowledge (Kumambouw *et al*, 2023). Apart from knowledge, an attitude is needed to deal with disasters such as floods. An attitude that is based on knowledge will be better and more lasting than an attitude that is not based on knowledge. The expected attitude in research(Rustam *et al*, 2022) is an attitude that occurs at the first level, namely receiving. Where receiving this can be interpreted as whether a person accepts and pays attention or not to the presence of a stimulus that has been given by the object.

Preparedness is an initial capital owned by the community or as a capacity to reduce the impact of disasters that may occur. If preparedness is cultivated in the community from an early age, then the community can have resilience in facing a strong disaster. The community needs to know because knowledge is very important, especially about a disaster which can have a positive impact if a disaster occurs in the community area(Hamid, 2020). Preparedness is an important phase in starting a plan with an activity carried out before a disaster occurs, this is like preparing a bag that is easy to carry when facing an emergency such as a disaster, namely a flood. When a disaster occurs, where do you go to ask for help and where to gather, as well as how to take action if an evacuation is to be carried out if a disaster strikes the area t (Jannah *et al*, 2020).

There are several things that someone needs to pay attention to regarding preparedness knowledge. Some of these things include age and education factors. Age and education can influence knowledge in a person's preparedness to face disasters. This emphasizes the need for integration of education regarding disaster preparedness in a formal education curriculum. Relevant parties are expected to be able to integrate the two (Pertiwi *et al*, 2021). Community knowledge is important in disaster preparedness. The results of the research show that a knowledge parameter and an attitude parameter is a parameter with the highest index value (86.3), while the parameter in the emergency response plan has a value of (65.4), and the parameter in the disaster warning system has a value (75.9), and supporting resources with value (51.3). Then, if the index is calculated as a whole, you will get a result value of 75.4. It can be concluded that the Kebon Pala community in Kampung Melayu Village is in the "ready" category when facing a disaster, namely a flood disaster (Putri and Mushoddik, 2022).

Apart from the two factors, age, and education, there is also the gender factor. The most common gender was male. The results of previous research (Fadilah *et al*. 2021) stated that gender influences disaster preparedness because with differences in gender, men and women may form different perceptions which can influence different attitudes and knowledge between men and women. men and women in facing a disaster.

Age is one of the factors related to knowledge. The results of this research show that the majority of people are in the young adult category, comparable to research (Suwarno and Nur 2019) showing that the majority of people are at the middle or young adult level. This shows that the young or middle adult level shows that they have good knowledge of disaster mitigation.

The community's experience in dealing with floods has been done, for example, by paying attention to the rainfall that occurs. If the rainfall is high and lasts for several days, flooding will occur. The community anticipates a flood occur by saving valuable items such as diploma certificates and important correspondence. Flooding occurred in Joyontakan Subdistrict, Surakarta City, apart from the high rainfall, the natural conditions where the housing was located slightly down from the main road, resulted in the water falling when it flowed downwards, which caused the river not being able to hold the water, the water to enter the houses. homes. The experience of the Joyonta Village community is that they get sources of knowledge from outreach from educational institutions and outreach from the local government regarding flood disaster mitigation. Past flood experiences have increased residents' knowledge of what to do when a flood disaster strikes in the area.

Based on the results of this research, it was found that the level of knowledge of residents in RT02 RW 01 Joyontakan Village was in a good category, so a good level of knowledge of residents would make residents and the environment ready for flood preparedness. Apart from that, the results of this research can provide benefits to local governments in disaster mitigation. The type of knowledge emphasized in community education is related to flood disaster preparedness and mitigation.

This research only has a small sample size because it only conducted research in 1 RT area (RT 02 RW 01) so it does not cover all residents in Joyontakan Village. The area coverage was also only limited to 1 RT so the sample used was not that large so it was taken with total sampling. In the future, it is hoped that research will involve more samples and a wider range of places to conduct research.

CONCLUSION

Good knowledge is needed to support preparedness in facing a disaster, such as for flood. Community knowledge is very necessary in dealing with disasters such as floods. With high knowledge or good knowledge, the community will be prepared to face events such as flood disasters. The role of government agencies is to provide health education or outreach and education about disasters and how to deal with a disaster if a disaster strikes the community. Based on the research results, it is hoped that the local government will invite residents to continue to increase their knowledge regarding disasters, not only floods but other types of disasters that have occurred in the area. Suggestions are also given to educational institutions to be able to provide additional information and by holding various trainings and workshops. This is to increase knowledge in preparedness for disasters that hit an area but also increase community insight to increase community resilience in facing disasters.

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