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The family preparedness of children in dealing with a flood disaster in Paupanda II Village, Wewaria sub-district of Ende Regency Indonesia

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Abstract---Background: For almost ten years Wewaria Village, Wewaria sub-district of Ende Regency suffered a flood disaster. The flood occurred in 2008, 2012, and 2016. Paupanda II Village has a puddle up to one and a half meter every year. Flood emergencies can cause family panic in rescuing themselves or their children under five. Children are a vulnerable group in the health sector because they cannot help themselves, when floods. If family preparedness is low, then the child's health threatened, increasing the child's morbidity or mortality rate. Purpose: This study explains or explore the experience of family preparedness who have children under five dealing with floods. Method: it used Purposive sampling in selecting the first informant then using snow ball sampling for the next informant. The number of samples is 9 people taken from a family of 6 people, 2 policy stakeholders, and 1 health worker. The qualitative analysis used is triangulation of data sources. Results: Family knowledge is well, but preparedness is still low for children needs, flood early warning, flood emergency response preparedness, and resource mobilization deal with floods. Conclusion: Family preparedness is still low for flood disasters, this is because there is no organization to coordinate flood preparedness. We recommend it to form a flood

disaster organization in Paupanda II village, Wewaria sub-district of Ende Regency.

Keywords---family preparedness, flood, preschool.

Introduction

Indonesia is geographically and geologically located in the area of the island that is prone to flood disaster. Likewise with the district of Ende has a different topography with other districts in Flores. The mountain is towering with steep edges and underneath the river flows. Most people or communities reside on the slopes – the slopes below the foothills and surrounding plains are a river that is at risk of flood disasters and landslides. Based on the recapitulation of the disaster data by the National Disaster Management Agency (BNPB, 2017) disasters throughout the year 2017 (January – March) There are 654 incidents, the most common is flooding (31.4%), landslides (21.4%), and fires (17.8%) . Ende Regional disaster Management Agency (BPBD, 2017) that Ende district recorded 11 types of disasters from 13 disasters nationwide, the highest is flood disaster and landslide. The most common area of flooding is Wewaria, Maurole and Kotabaru subdistrict. These areas are lined by the Loworea River which is driven by 9 tributaries. Almost every year a flash flood and overflowing rivers occur. The loss of the flash flood in 2016 from 3 sub-districts has almost reached 10 billion. Wewaria Subdistrict since 2013 – 2017 Wewaria village is most potentially affected by flooding from other villages. Wewaria village in December 2016 occurred overflowing river, while February 2017 happened again the flood disaster with a loss of 25 ha of submerged rice fields resulting in a failed harvest, and 89 houses were damaged lightly, with a total loss of 200 million Rupiah (BPBD Ende, 2017).

Flood disasters can result in health crises such as the fall of mass victims that inflict death, injury, or evacuation and destruction of infrastructure, including health facilities such as hospitals, health centers, police centres, Possessions, animals, paddy fields and others. Disaster flooding that occurs in the relatively long time can cause damage to the sanitation system and clean water and potential raises extraordinary events (KLB) diseases that can be transmitted through water media (water borne disease) such as diarrhea And Leptospirosis and still many other infectious diseases. Besides, in flood emergencies, families panic to save themselves or rescue toddlers. Children are vulnerable groups in the field of health because they cannot help themselves, when the flood disaster. If the child's low-health preparedness is threatened, it increases the child's morbidity or mortality rate.

In the preliminary study, Mr. Y (52 years old) in Wewaria said that the efforts of preparedness that has been done in the face of flood disaster is still not maximal and as-is, only limited to evacuated valuables such as clothing, books Schools and electronic goods to a safer place in the family home. It is for infants and toddlers to be helped as well as possible by their parents. This shows that awareness about the importance of disaster preparedness has not been held by the community and this preparedness does not originate from training or

government notices but only their experience has been long. Suffered a flood disaster. Disaster management is often only limited to short-term reactive responses and is less oriented on the proactive measures of flood disaster preparedness. This research aims to explain or explore the experience of family preparedness that has a toddler facing a flood disaster in the hamlet of Paupanda II village Wewaria District Wewaria.

Method

Qualitative research method with purposive sampling technique in the first informant selection using Snow ball sampling where the first obtained sample by contacting someone then ask to advise on People who are viewed as having accurate information. The measuring instrument used is a deep questionnaire. The qualitative analysis used is the triangulation of the data source.

Result and Disscuss

Family Knowledge Of Flood Disaster

According to the experience during the informant lived decades (years 2007-2017) in Paupanda II Hamlet, the flood disaster faced increasing the knowledge of signs of flooding. Six of the nine well-educated and medium-sized informant said before the flood was cloudy and dark, there was thunder, lightning and heavy rain. Here are the informant statements:

"We know, if it has been raining.... Dark, thunder, this would have been a flood" (I. 2).

Meanwhile, one in four informant says that the flash floods are usually suddenly heavy rain then floods, without being preceded by signs such as cloudy, dark. The Informant statement:

"Sometimes we can not predict because even though we here are not overcast, but a night of heavy rains and floods. He said it was a flash flood" (I. 1).

All informant say that the cause of flood is 9-10 tributaries are estuary to the river Loworea, thus exceeding the capacity, and the condition around the river is used as settlement of residents, whereas the river Loworea is used to irrigate the rice fields. The informant statement on the cause of flooding as follows:

"Kali (river) Loworea was BU, the time it was a capacity of 9 children times" (I. 1).

"We lived around this time Loworea, rice to the water from Loworea" (I. 2).

Public figures say the same thing about the cause of flooding. Statements are as follows:

"Yes, from 9-10 times, BU comes down to Loworea, one of the causes" (I. 8).

Six of the nine informant know that the features of the building are spared from the flood, the stage house. The kitchen building is made stage, but the house is not made stage due to expensive timber budget. Informant information as follows:

"Yes..... Because we always flood disaster, so the kitchen is made stage bu..., if the House stage Tu..... Iiiiiii.... The budget is BU. More half-dead look for bu wood here if wood used to be much for Tiang-tiangnya" (I. 3).

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Table 1. Family Knowledge And Attitudes

Findings about family knowledge and attitudes	
The signs of flood	Before the flood were cloudy dark, thunder, lightning and heavy rain. Sometimes there are no signs, suddenly heavy rains at night
The cause of	Loworea River floods is the estuary of 9-10 tributaries
The natural condition of	Paupanda is a watershed area of rice fields, and residents residing around it.
The feature of flood area	building is supposed to be house building stage, but difficult budget for timber procurement.

Source: Primary Data, 2017

The results showed that the family had a good knowledge of the flood disaster. This is because the family experience has been flooded over and over again, where almost every year there is a flood disaster in the region. This experience is empirical knowledge. The results of this study correspond to the statement Notoadmodjo (2010), that knowledge is the result of the know and this after people do sensing the particular object. Sensing occurs through the faculties, namely vision, hearing, smell of taste and raba. Some knowledge is obtained through the eyes and ears (Notoadmodjo, 2010).

Family preparedness and preparation of toddler needs in the face Flood

All informant according to their experience that every time flood, either flash flood or flood due to the spit of river water, they evacuate and always the precedence is their children. Here are the informant statements:

"We ran masing2 mother, we were the totebags of each child, whether I want to flee where, then I find him" (I. 1)

"We bring it with each child running no flashlight, fortunately there is now an HP Flashlight" (I. 2).

At the time of the family evacuation always does not prepare the need for toddlers such as food or clothing and so on, although they know that there will be flooding. According to them the water will recede from the house shortly. Here's the informant information:

"IIII mother, there is no thought so, anyway save life first, just a flood recently 2017 this year, we knew it was raining steadily to.... Dark, thunder, this is definitely a flood. So we prepared the kids ate first and we all ate, new we moved to a family that was not hit by a flood. We are not prepared specifically for children "(I. 2).

"We do not bring anything, because usually not long receding water. Then we go home again, just cook, wash, clean again mud.... "(I. 4).

Family preparedness According to all the informant to the storage of groceries at home is always kept in the kitchen, because the kitchen is made stage. While the clothes hung above the house pole. Below informant information:

"Mother..... We have stored in the kitchen of rice, vegetables, because in the kitchen stage. While our clothes bind with a new batik cloth ikat above the Rege House "(I. 2).

The need for clean water at the time of the family flood was not difficult because it got relief from UNICEF in 2012. Here's informant information:

"We have the BU Rainwater Reservoir, Kalu Wells already No..... yes... Help UNICEF "(I. 3)

The health of toddlers after the flood in 2012 years ago was experiencing diarrhea, ISPA, hives, but afterward never again, if some are sick, the family immediately brought to the Puskesmas. Information from the following informant:

"There is a sick mother digers, cough cold, but that is the year 2012 mothers, until 3day doctors and nurses from Puskesmas make service here. But lately NI was lacking, no more, not much to the first. Because most already understand if there is flooding tu, anak2 sick directly to the Puskesmas ".

Table 2. Family Preparedness Meets The Necessities Of Life

Findings on preparedness to prepare the needs of family and toddler life	
Preparation of groceries in evacuation	never prepared for a meal for toddlers, because the water will recede in a few hours, then return home.
Grocery and clothing storage in	the food house is kept in the kitchen, due to the stage kitchen, while the Pakainan is tied on the pole of the house.
Clean water needs	no problem, because there is a rainwater relief in UNICEF
Health needs	not prepared specifically, infectious diseases after flooding such as heat, cough, cold, only years 2012 until now does not exist. If you are sick directly with medical health

Source: Primary Data, 2017

The results of this study were found preparedness of the needs of the family is very lacking. All families do not prepare the need for clothing, food in a shelter both for themselves and for toddlers. But the food and clothing in the house was stored in the kitchen that the construction of the building stage and clothes hung on the house pole. This situation occurs only waiting for low tide from home in a few hours. The findings are very different from the research results of Nurrahmah W (2014), saying that the repetitive flood incident made them become accustomed in performing acts of preparedness against flood disasters. Sagala Research (2014) also found the same thing where a long history of flooding has occurred, making the community accustomed to doing various actions to reduce the ririko of the natural family.

Family policy in the preparedness of flood disaster

Every incident of flood in an emergency, the family always chooses to evacuate to a family that is not affected by the flood, but there is also the village office and Wewaria Elementary School. Here's informant information:

"We agree to the family above, some to the village office, and ELEMENTARY School" (I. 2)

"We always go to families whose homes are not flooded" (I. 1).

The results of the study of family policy in the preparedness of the disaster faced a good flood, as seven of the nine informant chose to evacuate to a close family during a flood emergency. This shows the engagement of the family is quite high here. The family understands that close relatives can reduce suffering during a flood disaster, before being helped by other parties such as from the government or community social institutions.

Level of emergency response plan in family preparedness facing flood disaster

When the family floods helped themselves and the children. No team helped help the family such as the Regional Disaster Management Agency (BPBD) or from other government, except the year 2012 from Sekdes Suruh to the village office or SD school Wewaria. There are no evacuation shelters. The informant statements are as follows:

"No shelter. We went to families whose homes were not inundated." (I. 1).

"When we run in the dark, only sekdes who have to take refuge in village or ELEMENTARY office, there is no mother post, because the flood was longest 6-8 hours, so after that we go Home Again" (I. 2).

If the flood disaster due to the widespread volume of water, usually they do not do not be used unless the water is already one metre. Information from the informant as follows:

"We run also if the flood is about one meter, if we have not just wait at home" (I. 2).

The informant statement on the plan of emergency response in family preparedness is facing a flood disaster, according to the information presented by the father of Wewaria and community leaders as follows:

"There is no post here, the evacuation route does not exist yet, if the flood path for warning to society in the rainy season, there is along the River Loworea" (I. 5).

Table 3 Level Emergency Response Plan

Findings on the level of emergency response plan	
The evacuation team	does not exist, we save ourselves except the year 2012, there is a sampan of the community that used evacuation by our own.
The local government or public figure policy	does not exist, only in 2012, ordered by village secretary to evacuate to the village office or Inpres Paupanda

Source: Primary Data, 2017

Emergency response in family preparedness facing a flood disaster in Paupanda II Hamlet has never existed, there is no flood. There has been no flood disaster management either from non-governmental organizations or from local governments. The family evacuated his own disaster emergency. The results of this study according to research Nurhaimi and Rahayu (2014) who said that ogist all family research was never evacuated when the flood only took refuge to the close family, other homes are safe because there are no refugee camps. Real disaster preparedness is the readiness to save yourself, helping family members, friends, and citizens around the time the disaster occurs (KAPUCU, 2008).

Early warning system in family preparedness facing flood disaster

Families require early warning ogist including warning signs and distribution of information in the event of a disaster. Good early warning systems can reduce the damage experienced by the community (Gissing in Sagala, 2014). A good system is ogist where the community understands the information provided by the early warning sign or knows what to do if at any time there is an early warning sign sounding or lit (Sutton & Tierney, 2006).

The family has never experienced any early warning signs, or any sounds, such as the Pluit hazard sign that has promptly evacuated both from the government and from local community leaders. The family evacuated from hearing a flood, and the water was flooded at home. The information is as follows:

“There are no signs – signs or sounds of pluit we ran each” (I. 1).

“There is no BU, we were surprised because of the sound of flooding, then see the water is already in the house, continue to run, there is no command or no sound pluit suruh Run” (I. 4).

Information about early warning in the face of flood disaster in line with statements from the following public figures:

“We fled without being ruled by mothers or signs, because midnight, usually the water was until the new house ran” (I. 8).

Table 4. Early Warning System

Findings on early warning systems	
Flood warning information	There are no signs – the signs or sounds of Pluit family run to each family save themselves
Coordinating local government or community Ogi to evacuate	the family run without being ruled from anyone, because midnight, usually water is already until the new home knows that there is a flood

Source: Primary Data, 2017

The results of the study gained that in a state of flood hazard, the family responded to itself for evacuation, no warnings from the government or from non-

governmental organizations. This results in line with the research results Azmeri DKK (2016) in Krueng Teungku District Seulimun Aceh Besar District. It is reported that there has been no early warning detection tools in the flood disaster, despite having an organization of flood disaster.

The rate of mobilization of family resources that have a toddler in the face of flood

The aid that was received during the disaster 2008 is ogistic form of rice, instant noodles, clothes both adults and children. Catastrophic floods in the year 2012-2014 only rice, instant noodles and aqua. As for the training of preparedness or disaster mitigation has never existed. The year 2008 was once recommended to make a communal kitchen, but the citizens did not receive the Ogisti Ribet, and it was inconvenient. The Informant statement:

"Help most rice, noodles and aqua. If in the past year 2008 there is help from ogist and the people's up to the blanket baby, clothes etc (I. 1).

"There is already a mother, have been teaching (training), but to make a public kitchen, many

Do not want to bother with young children, new IIII Ribet "(I. 3).

Community leaders also said that there has been a training for a public kitchen, but not carried out because of rain or water is not long ago was receding. Statements are as follows:

"There is also ever, forget me what year, that time training for IBU2 open a public kitchen, but to this day, every time the flood is never there, maybe Ibu2 not want a flood not long ago, not up to 12 hours, people have already returned home each" (I. 7).

There has been a training conducted by the Ministry of Social and Education in 2008, so there is never any further training. Here's a statement:

"If the aid of the 2007/2008 was from the Ministry of Ogist and Kesbangpolmas. Help with clothes, blankets, baby diapers, pempers, rice, noodles etc. Likewise with training, the time of cooperation between Ogist and Kesbangpolmas done 1 time about making flood lines, emergency handling. Then never exercise Again "(I. 5).

Non-governmental residents in 2012 to resist flooding in order not to enter the settlement by arranging a sand sack, apparently not ogi lasts long, then broke again. While government assistance is still around ogistic emergency handling after the flood. There has been no solution to reduce the risk of flooding inundrum to resident settlements. It has been carried to make the Netlon 400 meters but has not been realized. The Informant statement:

In the year 2012 we made a from the sand sack but could not resist any more, preferably it should be a netlon to withstand the flood widened here. (I. 2).

"No BU, it used to be 2012 I was still the head of the village I had a proposal of Bronjongnisasi 450 m to resist abrasion, but until now there was no realization. I do not know that there is a work wall supporter not Netlon 25 m long, what is the realization of my proposal or a new proposal by headvillage now "(I. 1).

Table 5 Family Resource Mobilization Rate

Findings on the mobilization rate of family resources	
Availability of human resources, facilities and infrastructure	No Posko, nor training on flood disaster except 2008 years there is training from cooperation of Kemensos and scholarship. Been training about a communal kitchen, but we did not want to because the fuss and Ribet
Non-governmental	Year 2012 we made the embankment from the sand sack, but the break again is not strong, should use Bronjong.
Local Government assistance	There are assistance like rice, noodles, aqua, years 2012 up to blankets etc. It was once proposed bronjongnisasi along 400 meters in 2012, but it has not been realized until now. There is a 25-metre long supporting wall work.

The results of the study received government assistance, which was given only after the flood, there was no help for flood risk reduction solutions such as embankment making. This result is not in accordance with the research of Nurrahmah W (2015), in RT 001 RW 012 of Bintaro Village, Kecamatan Pasanggerahan Jakarta Selatan that the solution of flood risk reduction with the manufacture of carried out by the government. According to LAW No. 24 of 2007 on disaster mitigation says that disaster management is a series that includes a set of building policies that risk causing disaster, disaster prevention activities, emergency response and Rehabilitation.

There has been no training on flood disasters since 2008. It is not in accordance with Jurenzy Research (2011) That 30 respondents who suffered a flood disaster there are 23.33 percent of respondents who have already participated in the training of flood management efforts, while 16.67 percent have been in disaster training Flood. In addition to having not participated in the training provided by the Government or community social institutions, the family also never get flood disaster information from social media such as from television and others.

Conclusion

Family knowledge of flood disaster is good, but family preparedness is still low on readiness policy, food and toddler needs, emergency response, disaster early warning, mobilization of flood disaster resources. This is because it does not yet have an organization to coordinate flood preparedness.

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