ANALYSIS OF FAMILY PREPAREDNESS IN FLOOD DISASTER

Setianingsih*, Lestari Eko Darwati, Anggita Retno Setyowati
Nursing Science Study Program, Sekolah Tinggi Ilmu Kesehatan Kendal, Jln Laut 31A Kendal, Jawa Tengah,
Indonesia 51311
*ningsihsetia9988@gmail.com

ABSTRACT

The family is part of the community, preparedness of disaster must be owned by the family because has an important role namely planning for family rescue in the event of a disaster emergency in determining whether or not ready impending disasters. Flood disasters often cause losses such as home, environment, property, and life. The purpose of this research is to analyze of family preparedness in flood disaster in Kendal Regency. The design of this research is descriptive survey approach. The sample in this study amounted to 157 family heads with proportional random sampling technique. Data collecting with form of a questionnaire with the validity test was in the range 0,468-0,786 and reliability test was 0,875. The analysis used an univariate. The results showed that the characteristics of family heads based on gender were dominated by male as many as 155 (98.7%), the average age was 40 years old with the youngest age 23 years and the oldest age was 72 years, the majority of high school education was 114 (72.6%) and labor dominated by 62 heads of family (39.5%). Family preparedness to flood disaster, majority was high categories were 103 heads of families (65.6%). The result of this study prove that people in Kendal regency are ready to face flood disaster.

Keyword: disaster; family preparedness; flood

INTRODUCTION

Floods are the third largest natural disaster occurrence in the world, reaching 55% (Pusponegoro, 2011). Floods occur because rivers or channels are unable to drain rainwater that flows over the surface (Dodon, 2013). The incidence of flood disasters in Indonesia from year to year has changed, namely in 2016 as many as 824 times. Flood events in 2017 showed an increase to 979 events, and in 2018 showed a decrease to 871 events. The incidence of flood disasters until 2019 has decreased, namely 549 times. This also occurred in Central Java, which experienced an increase and decrease in incidents in 2016 as many as 136 out of a total of 600 incidents. The most flood incidents in Kendal were in 2012, namely 10 times out of 20 events. Flood disasters in 2016 occurred 5 times in Kendal City. Flood disaster in 2017 experienced a decrease, namely 4 times out of a total of 13 events. Meanwhile, in 2018, floods experienced a decrease of up to 1 event, and showed an increase in 2019, which was 7 out of 24 events (BNPB, 2019).

The negative impact of flooding will occur in several aspects with the level of heavy damage to aspects of the population, aspects of government, economic aspects, aspects of facilities / infrastructure, and environmental aspects. Aspects of the population include fatalities / deaths, drowning, drowning, injuries, missing victims, displacement, disease outbreaks and isolated populations. The community also has difficulty getting clean water to carry out their daily activities such as eating, drinking, bathing, defecating, washing and washing. To reduce the negative impact of flooding, it is hoped that the community will be prepared to face floods (Mistra, 2015).

Research by Harahap Lufti Muthalib (2015) states that preparedness for floods will show an attitude and knowledge in dealing with disasters and an important part, especially in areas that

are often hit by flood disasters such as Bukit Lawang Plantation Village. One of the efforts that can be made to minimize the impact of flood disasters is to have community preparedness efforts. Preparedness is a series of activities concerning the needs that will arise in the event of a disaster in order to anticipate disasters and prepare the community for better preparedness / preparedness in facing disasters. Community preparedness is needed to ensure an effective response in the event of a flood disaster so as to minimize the negative impacts that arise from the disaster (Yuliana, 2016).

Aji's research (2015) states the disaster preparedness in the community can be seen from 3 phases are pre-disaster, emergency response, and post-disaster. Pre disaster by the community in the sub-district wagian in the face of a flood disaster was classified as low (35,48%), preparedness (emergency response) when a disaster occurs is classified as moderate (56,67 %), and post-disaster preparedness (rehabilitation and reconstruction) is included in the medium category (45,33 %) . Actions taken before the flood occurred, namely the community preparing disaster preparedness bags containing important documents (3.33%), preparing foodstuffs for emergency needs (10%), preparing equipment for evacuation (21.67%), renovating houses by raising the foundation houses become two floors (41.67%), placing valuables in a relatively safe place (23,33 %). Actions taken by the community during the flood were to stay at home to maintain the safety of their belongings (36.67%), seek information related to flooding through neighbors, handy talkies, cellphones, television and radio (25%), ensuring food supplies/ sufficient logistics (6.67%), ensuring all family members are safe (20%), evacuating to a safe place (1.67%), and ensuring vehicles are in a safe place (11.67%). Based on information from respondents, very few people evacuate / evacuate or stay at home when a flood occurs, because most people have already elevated their houses. Actions taken by the community after the flood were cleaning houses and items from water / mud / flood waste (58.33%), providing clean water needs and toilet facilities for family needs (13.33%), ensuring family health conditions from the impact of flooding (8.33%), doing mutual cooperation to clean the environment from various garbage / flood mud (15%), and ensuring the electrical panels in the house are safe (5%) (Akhirianto, 2018).

The results of interviews in Kendal District showed that 100% were often hit by floods when continuous heavy rains caused river water to overflow due to residential areas beside the river, 60% said there was no preparation for floods and 40% stated that they had prepared themselves by securing securities, raising electronic goods to a dry place, 50% said they were often affected by flooding such as rashes, 60% said they were reluctant to evacuate because they were used to being hit by flooding every year.

METHOD
The research design used by researchers was descriptive with a survey approach. The sample in this study were all heads of families in Ngilir Sub-district at Kendal Regency totalling 157 people. The sampling technique in this study is to use Proportional Random Sampling. This research tool using a questionnaire the validity test was in the range 0,468-0,786 and reliability test was 0,875. Data analysis using univariate.

RESULTS AND DISCUSSION

Table 1.
Frequency of family head characteristics based on age, gender, education, and occupation
(n=157)

Variabel	f	%
Age (Min-Max=23-72 M=40,67; DF 10,195)		
23-39	76	48,4
40-56	68	43,3
57-72	13	8,3
Gender		
Male	155	98,7
Female	2	1,3
Education		
Not school	9	5,7
Primary School	5	3,2
Junior High School	21	13,4
Senior High School	114	72,6
University	8	5,1
Occupation		
Private	55	35,0
Goverment employees	4	2,5
Laborer	62	39,5
Farmer	22	14,0
Others	14	8,9

Tabel 1 showed that the characteristics of family heads based on gender were dominated by male as many as 155 (98.7%), the average age was 40 years old with the youngest age 23 years and the oldest age was 72 years, the majority of high school education was 114 (72.6%) and labor dominated by 62 heads of family (39.5%)

Table 2.
Frequency of family preparedness to face flood disaster (n=157)

Family Preparedness	f	%
Very low	19	12,1
Low	30	19,1
High	103	65,6
Very high	5	3,2

Table 2, Family preparedness to flood disaster, majority was high categories were 103 heads of families (65.6%).

Table 3.
Frequency of family preparedness answers to flood disaster (n=157)

No	Family Preparedness	Yes		No	
		f	%	f	%
1	The family must have a family rescue plan in the event of emergency disaster	157	100,0	0	0,0
2	When the flood gets worse and makes it impossible to stay at home, the family immediately evacuates all vulnerable family members such as babies, children, pregnant women and the elderly	143	91,1	14	8,9
3	Families do not own simple rescue and evacuation equipment such as live vest, simple rafts, etc. to anticipate disaster risks	145	92,4	12	7,6
4	Families must keep a stock of clean water and drinking water in sufficient quantity and quality that can be used during a flood disaster	111	70,7	46	29,3
5	During the flood disaster, the family only uses clean water for cooking and toileting	143	91,1	14	8,9
6	Families must prepare sufficient clothing, especially underwear and other personal needs before the flood disaster	140	89,2	17	10,8
7	Family must maintain a clean and healthy body, brush their teeth and take a shower everyday	125	79,6	32	20,4
8	Building house near the river and the area exposed to the threat of flooding	36	22,9	121	77,1
9	Families littering at home or in the river	28	17,8	129	82,2
10	The family must have prepared: savings, life insurance, property insurance, land / house in another place, etc., for family awareness of the possibility a disaster	126	80,3	31	19,7
11	Actively involved in the meetings for the preparation and planning of disaster risk reduction in the environment	134	85,4	23	14,6
12	If a disaster occurs, the family has relatives, friends, both inside and outside the village who are ready to help	120	76,4	37	23,6
13	Participate in community cleaning activities in the context of disaster risk reduction	35	22,3	122	77,7
14	Actively involved in the construction of structural mitigation facilities in the context of reducing disaster risk in the environment	14	8,9	143	91,1
15	There is no obligation to be actively involved in trainings or simulations on disaster risk reduction	111	70,7	46	29,3

Table 3 shows that family preparedness for flood disasters is mostly carried out by the community, namely as many as 100% of families already have a family rescue plan in the event of a disaster emergency condition when the flood gets worse and it is not possible to stay at home, the family immediately evacuate all very vulnerable family members such as babies , children, pregnant women and the elderly (91.1%). There were also things that were lacking in preparedness by the family, namely the family stated that they did not have their own simple rescue and evacuation equipment such as live vest, simple rafts, etc. to anticipate

disaster risk (92.4%). There is no obligation to be actively involved in trainings or simulations on disaster risk reduction (70.7%). So it turns out that there are still things that need to be improved, even though the preparedness is good.

Characteristic of Family Head
The results showed that the majority of family heads were male as much as 98.7%. Gender is the physiological and anatomical attributes that differentiate between men and women (Wade & Tarvis, 2011). The results showed that male genitalia tended to make more decisions to deal with disaster emergencies than women. This is because the male gender when encountering a disaster emergency reacts in a way that is appropriate to the masculine role, showing courage in providing help. The decision to provide help is not limited to who helps and when the help is given. The decision to provide help appears in individuals who have high empathy and concern, and are willing to provide help voluntarily without expecting direct benefits for themselves (Ramli, 2010). Sex of women and men may have differences in terms of being helpful, but it also depends on the nature and type of assistance needed.

The results showed that the average household head was 40 years old with the youngest 23 years old and the oldest 72 years old. Age is the age of an individual from birth to birthday, the more old enough, the level of maturity and strength of a person will be more mature in taking action (Nurlina, 2014). This shows that most of the people in Kendal Regency are still of productive age. This does not rule out the possibility that the community in Kendal Regency has high mobility. In addition, a productive population will help and facilitate flood preparedness. In accordance with research conducted by Wahidah (2016) which states that age affects flood preparedness. Early adulthood tends to be more alert to floods than the elderly.

In accordance with the theory which states that as individuals age, the more they will be able to understand or accept social norms so that individuals have the willingness to make decisions to help when a disaster emerges. Ages 17 years old who already have an identity card can be classified as those who tend to have the courage to make decisions to help when there is a disaster emergency (Dayakisni & Hudaniah, 2009). The results showed that the characteristics of the head of the family based on the education of the majority of Senior High School were 114 heads of families (72.6%). This shows that the people in Kendal Regency have a high level of education. An educated person has the ability to create a good relationship between fellow human beings, has a sense of responsibility and cares for the people around him, especially in disaster preparedness. The higher the education level of a person, the easier it is for someone to receive new information or new knowledge that they have, they tend to plan and prepare themselves in any situation and condition, including in dealing with floods. (Notoatmodjo, 2014).

In accordance with Ira's theory which states that the higher a person's education will make him a person who has a high responsibility and awareness of his social life. In other words, someone who has a high level of education will be able to create a good relationship with his social environment, so that he will have a sense of responsibility, high awareness and care for everything that happens around him, thus encouraging to prepare himself to face all situations. including floods. Therefore, it is said that a person's education level has a relationship with his tendency to carry out disaster preparedness.

The results of the study are in accordance with research conducted by Wahidah (2016) which states that the level of education affects flood preparedness. The higher the education, the more prepared to face floods. The results showed that the characteristics of the head of the family based on work were dominated by workers as many as 62 heads of families (39.5%). Work contributes to people's knowledge and behavior in dealing with disasters, because someone who has worked has broad experience and more experience than people who do not work and an individual will take action based on his experience. An experienced person will act according to the conditions they are familiar with and do not feel awkward in his actions. A worker has better information experience and adaptability than a person who does not work. Someone who works has broad experience and more experience than people who do not work (Purwoko, 2015).

Family Preparedness
The results showed that the majority of the family preparedness to face floods was in the high category as many as 103 respondents (65.6%). The results of this study prove that the people in Ngilir Sub-district, Kendal Regency are prepared to face flooding. This happens because floods in Ngilir Sub-district occur every year. The community in Kendal Regency also has a family rescue plan in the event of a disaster emergency (92.4%). The results of the research are in accordance with the theory which states that the preparedness efforts that are usually carried out against flood disasters according to are preparing for emergency needs during floods, such as equipment for rescue actions, for example rubber boats, vehicles and their fuel, fuel preparation, material supplies items needed in an emergency response condition, such as staple food, medicine, clean water, blankets, cooking utensils for the evacuation site, evacuation place, and having a family rescue plan in the event of a disaster emergency (ADPC, 2016).

Community preparedness in Ngilir Sub-district in facing floods is shown by the family already having a family rescue plan (who does what) in case of a disaster emergency, the family has a plan to immediately evacuate all very vulnerable family members such as babies, children, pregnant women and the elderly, the family keeps a supply of clean water and drinking waterll in sufficient quantity and quality that can be used during a flood disaster, the family prepares sufficient clothing, especially underwear and other personal needs before the flood disaster emergency, the family has prepared: savings, life / property / property insurance objects, land / houses in other places, etc., for family vigilance against the possibility of a disaster, families are actively involved in meetings for preparation and planning for disaster risk reduction in their environment, families participate in community cleaning activities in the environment in the context of organizer disaster risk management and families are actively involved in trainings or simulations on disaster risk reduction.

The results of the study showed (65.6%) high category family preparedness to face floods. The community has good preparedness but for the preparation of simple rescue and evacuation equipment such as live vest, simple rafts, etc. to anticipate disaster risk is still lacking. Besides, the community does not participate in training and simulations on disaster risk reduction. The results showed that the preparation of simple rescue and evacuation equipment such as live vest, simple rafts, etc. to anticipate disaster risk was still lacking because the community thought it had been provided by Regional Disaster Management Agency so the community did not prepare it, the community did not participate in training and simulations because there was no training and simulation about disaster risk reduction in the village.

CONCLUSION

The characteristics of family heads based on gender were dominated by male as many as 155 heads of household (98.7%), the average age of family heads was 40 years old with the youngest 23 years old and the oldest 72 years old, most senior high school education was 114 heads of families (72.6%) and the work was dominated by labor as many as 62 heads of families (39.5 %). Family preparedness to flood disaster is mostly in the high category, as many as 103 families (65.6%).

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