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## **Community Perception of The Causes of The Tsunami Disaster In Pandeglang Regency and Palu City, Indonesia**

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**Abstract.** The tsunami disaster resulted in many casualties, facilities and infrastructure, property, and environmental damage in both Pandeglang Regency and Palu City. As a result of this suffering, it is likely that this will become the basis for informants to express their perceptions about the causes of the tsunami disaster. A good understanding of the public's perception of the causes of the tsunami disaster will make it easier to understand the relationship between nature, humans, society, and capacities as well as how to overcome adverse impacts before the tsunami disaster strikes. This study aims to analyze community perceptions about the causes of the tsunami disaster in Pandeglang Regency and Palu Municipality. The research method uses a qualitative phenomenological design. The data collection method used in-depth interviews, direct field observations, and documentation to analyze what was revealed by 10 informants based on their knowledge and experience when affected by the tsunami disaster. The results showed that the causes of the tsunami disaster were the wrath of God, fate or fatalism factors, and natural factors. The fate factor or fatalism is a view that agrees to give up before fighting. This can disrupt the tsunami disaster management process using the new Paradigm. The new paradigm is to prioritize efforts to reduce the risk of tsunami disasters by making people and local governments aware in the form of disaster prevention measures. The action is to conduct a disaster risk assessment and make a contingency plan before the arrival of the tsunami disaster.

**Keywords.** Community Perception, The Cause, Tsunami Disaster

### **1. Introduction**

According to Law Number 24 of 2007, a disaster is an event or series of events that threaten and disrupt the lives and livelihoods of the community caused, either by natural factors or non-natural factors as well as human factors, resulting in human casualties, environmental damage, property losses. and psychological impact. From the above definition according to Watts (1983) that a good understanding of the factors that cause disasters, will lead to easy understanding of the dangers within the framework of the relationship between nature, society, humans, community capacities and how to overcome them. We will get this understanding by identifying the public's perception of the tsunami disaster in Palu and Pandeglang. According to Desmita, (2017), perception comes from English, namely perception, or from Latin, namely perception, both of which mean to accept or take. In a narrow sense, it means vision or how one sees something. In a broad sense, it means how someone gives meaning and judges something

after seeing it. Or in another sense, is giving meaning to the sensations that have been received. Notoatmodjo (2010), perception is defined as a process to conclude the information received and interpret it automatically based on experiences that have been experienced and events that occur in an object. The same understanding is also said by Sudarsono & Suharsono (2016), perception is one factor that shape one's self-awareness. The level of awareness depends on how a person gives a perception after seeing it, which directs his awareness to choose positive or negative. According to Riswandi (2009), interpreting perception is the way someone gives meaning to an event. Walgito (2010) states that a person's perception is an active process that plays a role originating from an external stimulus that involves relevant experiences, motivations, and attitudes in responding to the stimulus. Perceptions of informants are not also influenced by the mitigation role of National Board for Disaster Management (NBDM), such as preparedness activities or education and training or other strategies that function to increase capacity to deal with disasters (Ramadhan, Sawitri, Asep, Slamet, & Destia, 2020; Dewi, Tina, & Muhammad, 2021).

All the definitions above show that perception is an activity to interpret an event. The result of perception is knowing and choosing what action to take. As for this study, the notion of perception used is the informant's view of the experience of an event or the first event that has a negative perception. This negative perception is the negative impact of the devastating tsunami disaster in Pandeglang Regency and Palu Municipality which resulted in the loss of life and property and the environment that will never be forgotten. The informants used this acute perception and happened for the first time to reveal what caused the terrible impact of the tsunami disaster.

According to the Law of the Republic of Indonesia Number 24 of 2007 states that there are 3 factors that cause disasters, namely a) natural factors or natural phenomena such as volcanic eruptions, earthquakes; b) human factors or human intervention such as the extraction of oil and minerals in the sea resulting in subsidence of the seabed; c) social factors or lack of harmonious social relations such as economic inequality.

According to Nurjanah et al (2012) there are 6 perceptions or views about the causes of disasters, namely a) conventional views that consider disasters as destiny from God; b) the view of natural science states that natural disasters are natural physical changes that are beyond human ability to withstand them; c) the view of applied science which considers human science to be unable to withstand disasters; d) a progressive view which states that disaster is an inseparable part of development; e) the view of social science which states that disasters occur because humans are not prepared to face disasters; and f) a holistic view which states that disasters occur because humans do not recognize the hazards, risks, vulnerabilities and capabilities they have.

In this study, we will explore information on perceptions or views of others or perhaps new ones from informants. So far, there has been a growing view on the causes of the tsunami disaster (UU RI NO. 24 of 2007; Nurjanah et al (2012)). There were 8 informants in this study, regardless of their educational or economic background. However, prioritizing informants who directly felt the impact of suffering from the tsunami disaster. This research is new in looking at the perception of an informant without involving many backgrounds such as age, education, economic status, ethnicity, or religion. Thus, this study does not follow the advice of experts that a person's perception will be heavily influenced by internal factors from knowledge, family environment and demographics (Novita & Iwan, 2019; Mantiri, 2014; Kasir & Deni, 2019), and external factors, namely the influence of the external environment (friends, society or society). cultural development (Hasan, Boham and Rembang, 2016; Wusana & Hidayat, 2018).

In this study, internal factors and external factors that underlie the perceptions of the informants were not the main consideration. However, the main consideration is the knowledge and experience experienced during the tsunami disaster which was disclosed during the interview.

However, in terms of their religion, it turns out that all the informants are Muslim. This is not intentional so that in terms of religion, researchers do not look at the extent of their religious abilities or the extent of their obedience to God. Although according to Alwi (2014) it is important to see one's religious ability. This is because an individual who is capable to internalize and understand their religion will influence the interpretation of the disaster that happened. Here, they who have experienced calamity will have their perception. However, the unique experience will lead everyone to give a different meaning of what happened to them (Khairani, 2013).

This study selected community as research subjects or informants who were directly affected by the tsunami disaster and it was the first experience. Which was not forgotten by the informants because of the negative impact of the tsunami both in Pandeglang Regency and in Palu Municipality. As is known, the tsunami disaster in Sunda Strait Pandeglang Regency on December 22, 2018: resulted in fatalities 159, injuries 437, 1,495 people, and loss of wealth much, and heavy damage to the environment (Sutopo, 2018). While the impact of the tsunami disaster in Donggala bays Palu Municipal on October 9, 2018 result in fatalities in 2045, injuries of 4,612 people, and loss of 1,309 people (Tempo.co., 2018).

The tsunami disasters in Pandeglang Regency and Palu Municipal have similarities in victims and environmental damage, but there are different causes. An earthquake at sea caused the tsunami in Palu Municipality or according to the theory that is believed to date. However, the tsunami disaster that occurred in Pandeglang Regency or the Sunda Strait, was preceded by the eruption of the child of Mount Krakatau. So that the natural cause of damage in Palu Municipality is seawater waves, but the cause in Pandeglang Regency is the overflow of hot lava accompanied by seawater towards the beach. Meanwhile, at the time of the incident, there were also almost the same events in the Municipality of Palu, a people's party was held to give animal sacrifices to the gods in the sea, while what happened on the Carita coast to Tanjung Lesung was that people were happy to enjoy weekend recreation and there were events that used music. In this case, the conditions are the same when many people are enjoying the pleasures of recreation.

The existence of conditions that are enjoying fun recreational activities, but suddenly a tsunami disaster occurs, meaning that the situation is the same, namely there is no preparation to avoid a tsunami wave. Finally, there was a terrible impact from the disastrous tsunami in both areas where many lives were lost and treasures have been lost, and also serious environmental damage. Before giving a perception, the informants will have an attitude of accepting or rejecting this incident. According to Germer (2009), every individual will struggle to accept this condition. After going through the sensational process of the tsunami, feelings and thoughts will collide to have positive thoughts. Rejection and rejection will end with the realization over time everything has happened so you have to accept this situation and then have to recover.

With this tsunami disaster, of course, all informants will have the same feeling, namely a feeling of shock because it is sudden, and losing happiness becomes suffering quickly. So with conditions like this, researchers will see naturally, what perceptions are conveyed because of the terrible experiences they have experienced and felt. Informants will be free to express freely their status, about the causes of the tsunami disaster.

## **2. The purpose**

The purpose of this research is was to analyze community perceptions about the causes of the tsunami disaster in Pandeglang Regency and Palu Municipality.

## **3. Method**

The research method used qualitative with phenomenology design. This method and phenomenology design are used to explore and understand the meaning of what someone has experienced in their life directly (Creswell, 2016). In addition, phenomenological design Qualitative methods with phenomenological design allow researchers to involve a more in-depth investigation process and even examine all psychological behavior as inner perception (inner perception) until psychic action occurs (Lestari & Koentjoro, 2007). Psychic action arises because there is action. The tsunami's form disaster triggered the perception expressed by all the informants in this study. This study aims to analyze the perception of the causes of the tsunami disaster from the victims who experienced it directly in Pandeglang Regency and Palu Municipality. Data was collected through deep interviews, observations, and documentation. Subject research were 5 former victims of tsunami disaster from Palu and 5 former victims of tsunami disaster from Pandeglang. In retrieving informational data from these 10 informants, the researcher followed the opinion of Gentels et al (2015), where if the information obtained has been saturated or there is nothing new, then it may stop or not be forwarded to other informants. The number of 8 informants in this study was sufficient for one case studied (Dworkin, 2012; Smith et al, 2009; Ray, 1994; Parse, 1990). Data collected in analysis using the theory of used the theory of Miles, Huberman, and Saldana (2014), which includes data collecting, and data reduction, and data presentation, and concluding.

## **4. Result and Discussion**

The definition of disaster according to the Law of the Republic of Indonesia Number 24 of 2007, is a series or event that threatens and disrupts people's lives and livelihoods caused by both natural factors and/or non-natural factors and human activities, resulting in human casualties, environmental damage, losses. Property, and psychological impact. When viewed from the causes of disasters according to the reality on the ground, we can divide the disasters into: a) Natural Disasters, namely disasters caused by natural factors such as earthquakes, tsunamis, volcanic eruptions, floods, droughts, hurricanes, and landslides; b) Non-Natural Disasters, namely disasters caused by non-natural factors such as technological failures, epidemics, and disease outbreaks; c) Social Disasters, namely disasters caused by human factors such as social conflicts (between groups or communities), war, and terror.

In this study, what we discussed is the tsunami disaster which is a type of disaster caused by nature. The term Tsunami comes from Japanese, namely "Tsu" means harbor and "Nami" is the wave. A tsunami can be interpreted as a large tidal wave in the port, the difference between a tsunami wave and a wave caused by the wind lies in the water's movement. The waves caused by the wind only move the upper seawater, but in a tsunami wave, they move the entire water column from the surface to the bottom.

Another characteristic of a tsunami is its large wavelength, which can reach tens of kilometers, its speed of propagation in the deep sea at a speed that is reduced to about 25-100 km/hour, this speed can destroy life in coastal areas, the return of water to the sea after reaching the peak of the wave can drag everything back to the sea. The speed of the tsunami depends on the depth of the water when the tsunami wave approaches the coast, the height of the wave will

increase which is followed by a slowdown in the speed of wave propagation. The shallow coastal topography and friction of the seabed caused the reduced speed of the tsunami. The waves that are held back because of this deceleration will stack with the next incoming wave, causing the wave height to increase.

In a tsunami caused by an earthquake, it will pass through the subduction zone fault process. The subduction zone is a zone where the collision and subduction of the oceanic plate against the continental plate occur continuously dynamically. The process of subduction occurs when two plates approach each other and one of them sinks under the other plate, the plate movement then friction occurs which inhibits the movement of the oceanic plate, the slowing down of the motion causes a buildup of energy in the subduction zone and fault zone, consequently in that zone will occur pressure, tension, and shear. When the plate elasticity limit is exceeded, there is a rock fracture followed by a sudden release of energy. This process causes vibrations in all directions which is called an earthquake. An example of a tsunami caused by an earthquake at sea is the tsunami in Palu City (Lander, **Whiteside, & Lockridge**, 2003). The cause of the tsunami in Pandeglang Regency was the eruption of the tributary of Mount Krakatau (Williams, **Rowley, & Garthwaite**, 2019; Yudhicara & Budiono; 2018). The negative impact caused by the tsunami damaged everything in its path, buildings, plants, and human casualties, and caused saltwater pollution, damage to agricultural land, soil, and clean water, and could even sink land into the earth as happened in Palu Municipality.

For gathering data based on an interview from 3 informants in Pandeglang Regency and 5 informants in Palu Municipal who experienced tsunami disaster. The perception of informants is an understanding that they believe in their hearts. They are free to make an argument based on their religion, knowledge, experience, tradition, culture, and environmental perspectives (**Daswati, Samad, & Wekke**, 2019). The freedom to express this perception depends on what one has from the values, attitudes, self-concepts, and experiences that have just occurred as well as future expectations in the informants (Hanurawan, 2007).

The themes that can be collected and analyzed as discussion material from the results:

1) The first theme is God's wrath.

Some informants believe that there is a God's wrath because some residents have committed major sin deeds. Because of these deeds, finally, it makes God angry. Evidence of their statement represented by two of 5 informants:

*"First, when God's wrath, marked with the coming of heavy rains and winds that ...tent fluttering" (informant 1).*

*"Palunomoni is the first tradition that exaggeration deeds, that make it God angry. We take great sin we will not use it to be removed" (informant 3).*

The statement from 5 informants showed God has been angry with their bad conduct in the Sunda Strait of Pandeglang Regency and Donggala bay of Palu Municipal. The assuming of God's wrath means residents in both areas have religious understanding was good, that have awareness about religious values is high support and add that they include good follower of religion who have consistent choosing, do proportional conduct, and believe in God as God Almighty which is free from influence other factors (Jalaluddin, 2012; Aridhona, 2017). Proportional conduct is a character person who receives and admits the supremacy of God. The residents of Pandeglang Regency and Palu Municipal have the values of *the ideological dimension* was still high (Alwi, 2014).

About a resident of Sunda Strait has done major sin deeds in Pandeglang Regency and Donggala bay in Palu municipal:

a) Worship another Allah SWT The Almighty God.

Doing ritual ceremonies like Balia that giving some offer that is addressed to the sea god. This ritual is the same as asking for help from another God. The statement represented by 2 of 6 informants:

*"Because of shirk, .... Because of his immorality or violation, Petobo often commits immorality and Balia activities such as the lumping horse in Java..." (informant 4).*

*"I repeat this from the Mayor who still insists there must be a mountain ritual, summoning demons, offerings..." (informant 1)*

The ritual of worshiping someone other than God is a major sin and will not be forgiven. This event is purely an official in making interpretations and perceptions and then making mistakes in selecting the form of behavior that is taken. Wrong behavior so that in deciding it contains values that are not based on religion but based on ancestral traditions that previous officials have not followed for a long time. There are inaccuracies in the perception process, especially selection.

As a result, the existence of activities that worship other than Allah, such as giving worship as animals to the Sea God, means that people, according to Alwi (2014), have a low dimension of religious belief. Therefore, they want to try the dimensions of the beliefs of people who believed to have a prominent position in terms of heredity. Finally, they chose the customs of their ancestors (the ritualistic dimension) as seeking help other than God. However, they lack calculation, namely that there are consequences for people who worship or ask for help other than God, is that Allah will scold them and even get punished. The punishment for worshiping other than Allah will be heavier than committing other sins. The punishment was a tsunami disaster that claimed lives, property, and the natural and economic environment (Kemenag RI, 2017).

b) Doing acts of gratification.

The activities that lead to the satisfaction of lust are committing adultery and drinking at least hard, and useless acts such as watching entertainment. This statement was represented by 2 out of 5 informants, namely:

*"...lots of dimly lit cafes, tents. It's the two of you." (Informant 1).*

*"Everyone is not aware that there is a tsunami, it is fun to watch the concert" (informant 7).*

The second sin that is considered bringing God's wrath is the satisfaction of lust by drinking alcohol and free sex activities and enjoying entertainment which leads to acts that satisfy lust too. Actions imitate the lives of westerners. If these actions may become habits and even become entrenched among teenagers, of course, we are not willing. This new culture has the potential to erode the noble culture of the nation. Finally, it will change the concept of the nation's cultural values. According to Toha (1996), value is a thought or idea, or concept about what I consider important for a person in his life, then the values of the ancestors must be maintained.

For Indonesian people who have Pancasila values, the act of drinking alcohol and free sex is not yet worthy of becoming a national culture. Even Ekosusilo (2003) states that values that contain beliefs that form the basis for a person or group of people must be directed and guided so that their behavior or actions have meaning and are true for their

lives and those around them. If the act of free sex and drinking alcoholic beverages becomes a culture, then the punishment of God Almighty will come as the hadith of the Prophet Muhammad SAW which explains that there are two crimes that Allah will repay when in the world, namely adultery and disobedience to parents.

c) Ignoring worship.

Implementing ritual acts of worship to the god of the sea defeats the activities of prayer, even abandoning it. This statement is represented by 2 out of 5 informants, namely:

*"If there is entertainment, there is prayer. If you don't pray, you don't pray"*  
(informant 1).

*"So the hope is like a traditional ritual by cutting a goat at sunset"* (informant 5).

The statement above shows that there has been deliberate negligence by delaying the prime time for worship. They forget the Maghrib prayer, maybe even give up the Maghrib prayer because we have not completed it. The busyness of the world will forget them remembering Allah or Allah will be number two after the affairs of the world are finished. This means that the world is more important than the even though there is a verse in the Qur'an that "and the affairs of the are better and more eternal (Kemenag RI, 2017).

However, this act will be easily forgiven, if officials and the public repent. If the character of the victims of the tsunami disaster and the officials are good, of course, they will all compensate for their sins by doing good deeds, even if they are done by others. Such good deeds are like praying in congregation and giving alms and infaq. The author believes that the tsunami victims have excellent character, which can be directed. This according to Affandi (2014), it is said that people with excellent character will continue to do good deeds or there is a desire to do good always (desiring the good). This is following the word of Allah SWT that I will give those who want to do good the best way (Kemenag RI, 2017).

d) Do not follow the advice of scholars.

Officials or the public who were involved in the ritual of worshipping the sea God did not follow the advice or input from the ulama to stop the event. Likewise, BMKG has notified of the impending disaster before the event considering the abnormal weather and wind. This is following the statement of 2 of 4 informants, namely:

*"... scholars has forbidden it because that is the term polytheistic, but they still carry it out."* (Informant 3).

*"But the government is keeping quiet because it wants to hold this activity. Because BMKG has notified it"* (Informant 5)

According to the author, the ancestral ritual activities that lead to the worship of the sea god have good intentions in terms of economic and cultural meaning. The aim is to develop useful activities as an effort to empower the community to be aware of tourism. However, for ancestral rituals that no longer have contemporary meaning and value, they do not have to be used again (Sukanto, 2000). Keep in mind the bad implications of implementing an inappropriate culture because culture will affect behavior, norms, values, and other aspects.

Every official should have a progressive view of the culture and environment towards the occurrence of disasters. According to Pramono (2016), culture will survive and

be used continuously by the community if there is a process of environmental behavior relationship that involves a good cultural socialization process. The development of modern science and technology for detecting when a disaster occurs is already owned by BMKG. For this reason, the accuracy of the BMKG tool must also be trusted.

Likewise, with input and advice from scholars, officials must pay attention. It proved the previous Mayor to have not performed rituals to worship the sea god anymore. Ulama now study a lot of religious sciences and other sciences. So if they do not heed the advice of scholars, then the wrath of God will come. However, what must be considered is the quality of scholars who have high personal and religious integrity who may be followed.

This first theme supports the opinion of Mustofa (2008), where people have the view that disasters result from sinful acts and human violations of God's law that cross the line so that God needs to be punished. There is a flow of Escapism in disasters, so this first theme is part of the expansionist flow in disasters, in interpreting a disaster as religiosity with God's involvement (Shadily, 2019). Religion is an entity that is usually used as an escape when disaster strikes the community. Religion sometimes even drags people just to run away from the banality of life, because religion en masse in its ritual practices can provide inner peace in filling the empty religiosity amid daily routines (Sabir & Phil, 2019).

Based on the findings on the first theme, it shows that the perception of the 5 informants that a disaster is coming is caused by God's wrath for worshiping another Allah SWT The Almighty God, doing acts of gratification, ignoring worship, and do not follow the advice of scholars. In other words, according to Zuhri (2008) that the arrival of the tsunami disaster is a punishment from God because most of the people affected by the tsunami are still not consistent in serving God. This result is similar to the findings of Chester (2001), during the Lisbon Earthquake in 1755, which resulted in 60,000 deaths, which is believed to have caused a lack of harmony in the social order between believing in divine and worldly needs.

2) The second theme is that the tsunami disaster is destiny.

Seeing the tsunami disaster that just happened, some informants stated that all of this was the destiny of the Almighty. This statement is represented by 2 out of 6 informants, namely:

*"We as believers think that this will be the end of the world because based on the calculation of qomariyah it has entered Friday afternoon" (informant 4).*

*"Is it fate or what?" (informant 6).*

The informant's perception that the tsunami he experienced was an unavoidable destiny from God. This perception is the same as the view of the Conventional group which states that: a) disasters are natural (fate); b) the occurrence of a disaster is a disaster or accident; c) its arrival is unpredictable; d) occurrence of erratic time; e) when it comes it cannot be avoided; f) the nature of the disaster cannot be controlled; g) we see the community as a victim who will receive help from outside parties.

No one knows about the tsunami disaster in the Sunda Strait and Donggala Bay. We trained even though people in the Sunda Strait in preparedness to deal with tsunamis, there were still casualties. This further adds to the belief that the tsunami disaster was "the will of God" (the Acts of God), which humans could not afford (Lindell et al., earthquake at sea is the tsunami in Palu City (Lindell, Prater, & Perry, 2006).

With the above facts, it is necessary to have disaster management by applying a new view namely a holistic view. The holistic view has the following characteristics: a) prioritizes an approach that emphasizes hazards and vulnerabilities, as well as the community's ability to deal with hazards and risks; b) every natural phenomenon can be dangerous if it threatens people and property; c) the danger or threat will turn into a disaster if it meets the vulnerability and inability of the community to overcome it.

From the explanation above, people's perceptions will be different, disaster can be punishment or destiny. But now it is important to take preventive action before a disaster occurs. Therefore, disaster management must combine all views into a holistic view, where everyone should understand disaster risk assessment (threats or hazards, vulnerabilities, capacities), prepare appropriate early warnings, and prepare emergency response help, as well as post-mortem help. integrated one. Everything is to reduce the terrible impact of disasters and as a noble effort in managing sustainable disasters. All of this is an effort to change fate because disasters will be around us. This is under QS Ar- Ra'du verse 11 which means: "Indeed, Allah will not change the fate of a people, except the people themselves".

Based on the findings of the second theme, it shows that there are perceptions from 6 informants who believe that the tsunami disaster was caused by destiny from God. This is in accordance with the opinion of Nurjanah et al (2012) with the conventional view, which is evidenced by the fact that the arrival of a disaster cannot be predicted in advance. According to the researchers, this finding is a view of being powerless against God's will. These people tend to give up whatever happens is God's destiny that can't be challenged or changed. This view according to the researcher is a fatalistic view or giving up before fighting. This view should not be recommended to be followed because currently there has been a paradigm shift before the occurrence of a disaster, there must be efforts to prevent or reduce adverse impacts through disaster risk management actions.

3) The third theme is the natural factor of nature.

We can see this from the statements of several informants who still doubt the tsunami disaster because of the geographical location. The location that was hit by the tsunami was actually in the bay so that it was not possible to have a terrible impact from the tsunami. This is as stated by 2 out of 6 informants, namely:

*"My feeling is, it's not a tsunami because this is a bay and not the high seas" (informant 1).*

*".. I didn't think of a tsunami because it's a bay here" (informant 2).*

Informants who doubt or even say it is impossible because they are at bay, are views that follow the views of Natural Science. In this case, disasters occur because of changes in elements of the physical environment that endanger human life. However, one must be careful in applying the view of natural science, which is more concerned with natural imbalances than this view, assuming all disasters are natural events, not considering humans as the cause of disasters.

This group tries to see the cause of the tsunami disaster from a scientific point of view. According to Noor (2012), the plate movement then friction occurs which inhibits the movement of the oceanic plate, the slowing down of the motion causes a buildup of energy in the subduction zone and fault zone, as a result, pressure, pull and shear will occur in the zone. Donggala Bay and the Sunda Strait are not directly opposite the earthquake location, so the tsunami waves did not reach other locations. The cause of the tsunami

disaster in Pandeglang was the tsunami waves originating from an earthquake from the subduction zone in the southern part which is about 250 km and the activity of Mount Anak Krakatau in the Sunda Strait. The existence of a plate subduction zone in the western part of Sumatra Island, which is supported by an active fault line and a series of active volcanoes from the northern tip of Sumatra Island to the Sunda Strait area. The active Sumatran fault cuts the island of Sumatra off (Semangka) along 1,650 km and is the longest active fault in Indonesia (Naryaanto, 2008).

According to the active Palu-Koro fault, activity triggered the analysis of the Center for Volcanology and Geological Hazard Mitigation (PVMBG) in the Palu-Koro fault zone which is trending northwest-southeast (Tirto. id, 2018). The epicenter was at a depth of 10 km, with the position of the epicenter at 27 km northeast of Donggala. In addition, the Palu Bay section has an avalanche of seabed sediment at a depth of 200-300 meters. Sediment from rivers that empties into Palu Bay has not been strongly consolidated so that it collapsed and collapsed during the earthquake, triggering a tsunami.

This is a conventional but rational view caused by environmental factors that are not friendly to humans. This view is also under the views of Law No. 24 of 2007 and the United Nations International Strategy for Disaster Reduction (UNISDR, 2009), regarding the causes of this disaster include a rational view. This view is according to the flow of science. The view assumes that the cause of the tsunami disaster is a natural factor caused by a disturbed natural imbalance. The view of the flow of science also believes that the earth and nature are moving continuously to achieve balance. This situation already exists in the Qur'an Surah An-Naml verse 88. The development of knowledge has led to the view that disaster is a geophysical, geological, and hydrometeorological process that can affect the physical environment and endanger human life.

In this third theme, the findings of the third theme also show that some of the informants' perceptions believe that the cause of the tsunami disaster is natural factors or changes in the shape of nature from a physical, geological, and hydrometric point of view. The opinion of disaster management in disaster mythology means that people assume that disaster is a phenomenon in contingency reality that can be verified based on rational logic and the law of natural cause and effect, for example in the tsunami's case in Pandeglang and in Palu caused by buildings for housing and markets or trade and recreation areas are attached to the shoreline, resulting in many casualties and property (Sabir & Phil, 2019).

The results of the research on community's perceptions of the causes of the tsunami disaster, who at the same time became informants, could express their expressions based on their values and concepts and their beliefs spontaneously, shows that the causes of the tsunami disaster were: a) the anger of God for the sins that had been committed such as worshipping other than Allah SWT, committing adultery, not paying heed to worship, and not following the advice of scholars. This perception indicates that most of the informants believe in the power of God Almighty, which belongs to the flow of escapism so every disaster has religious values with God's involvement; b) the existence of a belief in God's will so that humans must accept it. This perception also implies accepting what is as a fatalistic flow or followed it just surrendering to the existing conditions. However, researchers still assess this perception, it has the value of an acknowledgment of the power of God Almighty; the eruption of Anak Krakatau Mountain which released lava caused c) the existence of natural factors from nature where in Palu Municipality it was caused by an earthquake in the middle of the sea, while in the Sunda Strait, Pandeglang Regency, it was caused by the eruption of Anak Krakatau Mountain which released

lava. This perception follows the second flow of escapism, namely nature which caused the tsunami disaster to occur, because human hands caused environmental damage.

From the explanation above, it can be analyzed that most of the informants have a perception that the cause of the tsunami disaster was due to God's wrath, God's destiny, and natural factors. The factor of God's wrath was mostly believed by informants in Palu than in Pandeglang. Prior to the tsunami disaster, in Palu there was a traditional ceremony of offering the head of a cow and offerings to the sea god, while in Pandeglang there was none. The second factor is God's destiny, this is proven by informants in Palu and in Pandeglang, both of whom do not know when disaster will strike. The third factor is natural, as evidenced by before the tsunami disaster in Palu was caused by an underwater earthquake, while in Pandeglang it was caused by the eruption of the Krakatoa volcano in the Sunda Strait.

The new finding in this study is the second theme, namely the cause of God's destiny factor which the researcher calls the fatalism view of the people of Palu and Pandeglang. The view of fatalism makes people surrender and give up without any effort, because they believe that destiny cannot be pursued. The view of fatalism, if allowed to develop in the community, will set a bad precedent in the implementation of tsunami disaster management. The new disaster management paradigm prioritizes disaster risk management by implementing disaster risk reduction through disaster risk assessment. Because it will be a tough task for BPBD officers in Palu and Pandeglang to raise awareness of the importance of disaster risk reduction. In other words, the negative impact of the tsunami can be reduced or even prevented by prioritizing actions before a disaster occurs, such as prevention, mitigation, preparedness, and an early warning system (Indonesian Law No. 24 of 2007; Nurjanah et al, 2012).

## **5. Conclusion**

The conclusion of this study are;

The perception of the causes of the tsunami disaster for the community is needed in measuring community understanding. The informants' perceptions in this study were based on events directly experienced by the informants, so that they could explain what caused the disaster according to their knowledge and experience. A good public understanding of the tsunami disaster will help smooth the implementation of subsequent disaster management actions. Even now, understanding the causes of disasters will be useful to prevent adverse impacts before the tsunami disaster occurs.

The results showed that there were 3 causes of the tsunami disaster, namely the wrath of God because they were considered less consistent in serving God, the fate factor or fatalism because they felt helpless, and natural factors or geophysical, geological, and hydrometric changes. Of these three factors, the factor of fate or fatalism needs to be considered. According to the researcher, this fatalistic perception or view is a view that agrees to give up before fighting. This can disrupt the tsunami disaster management process using the new Paradigm. The new disaster management paradigm prioritizes disaster risk management by implementing disaster risk reduction through disaster risk assessment by emphasizing the importance of disaster prevention before a disaster occurs (pre-disaster).

Therefore, it will be a new job for NBDM officers in Pandeglang and in Palu to be able to institute a new paradigm that prioritizes tsunami risk reduction by making the community and local government aware of conducting disaster risk assessments, as well as making contingency plans before the arrival of the tsunami disaster.

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