Analysis of the QS. Ar-Rum Verse 41 on the Tsunami Disaster Issue for UNP Students

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documentation. The data analysis technique was carried out using descriptive statistical analysis using a percentage formula which was then translated into narrative form. This research concludes that students’ attitudes towards earthquake and tsunami disaster mitigation are good with a percentage of 72.4%.

**Keywords:** Disaster Attitude, Mitigation, QS. Ar-Rum: 41

**Abstrak.** Universitas Negeri Padang terletak pada zona bahaya gempa dan tsunami. Sebaliknya sikap dan rasa ingin tahu mahasiswa Universitas Negeri Padang tentang mitigasi bencana masih kurang. Selain itu, rendahnya tingkat implementasi pengetahuan tentang mitigasi bencana oleh pemerintah dan instansi terkait juga masih kurang. Penelitian ini bertujuan untuk mendeskripsikan sikap mahasiswa Universitas Negeri Padang terhadap mitigasi bencana gempa dan tsunami di kota Padang. Penelitian ini merupakan penelitian deskriptif kuantitatif yang digunakan untuk menggali suatu kejadian atau fenomena-fenomena seperti apa adanya. Jenis data dalam penelitian ini adalah data primer yang diperoleh langsung dari objek penelitian dengan mengajukan angket kepada mahasiswa dan data sekunder dari berbagai buku dan artikel yang berkaitan dengan penelitian. Teknik pengumpulan data yang digunakan dalam penelitian ini adalah survei dan dokumentasi. Teknik analisis data dilakukan dengan analisis statistik deskriptif dengan menggunakan rumus persentase kemudian diterjemahkan ke dalam bentuk naratif. Kesimpulan dari penelitian ini adalah sikap siswa terhadap mitigasi bencana gempa dan tsunami baik dengan presentase 72,4%.

**Kata Kunci:** Sikap Bencana, Mitigasi, QS. Ar-Rum: 41

**INTRODUCTION**

Indonesia is a country prone to earthquake and tsunami disasters (Irawan et al., 2022). One of the earthquake-prone areas in Indonesia is the city of Padang. The city of Padang is located on the Indo-Australian plate which makes this city an area prone to earthquake disasters (Tanjung et al., 2019). Earthquakes caused by tectonic interactions and occurring in oceanic areas (Subduction) have the potential to cause tidal waves (tsunamis) (Astra, 2011). According to earthquake experts, Padang City is a potential tsunami area. The city of Padang is predicted to experience a large earthquake accompanied by a tsunami (Putera et al., 2020). Lack of knowledge and public attitudes towards the earthquake and tsunami disaster will be a big problem that must be considered because most people live along the coastline (red zone).

Padang City is an education center for students in the Sumatra regional region, especially in West Sumatra Province. One of the institutions that is the center of education is Padang State University (UNP). The location of the UNP central campus is not far from the beach. This affects where students who study at UNP live. On average, they live not far from campus, which means they are close to the beach. Considering that UNP is located in Padang City, which is an area prone to earthquakes and tsunamis, students on this campus must be equipped with knowledge about natural disasters.

In Law Number 24 of 2007 it is explained that a disaster is an event or series of events that threatens and disrupts people’s lives and livelihoods caused by either natural factors and/or non-natural factors or human factors resulting in human casualties and damage. environment, property loss, and psychological impacts (Suryanti et al., 2022).
The variety of factors that cause disasters means that a variety of skills are needed that can help with disaster risk reduction efforts. In this research, the disasters that occurred were disasters caused by natural factors, namely earthquakes and tsunamis. According to the Meteorology, Climatology and Geophysics Agency (BMKG), (2010), "An earthquake is an event of shaking of the earth due to the sudden release of energy in the earth which is characterized by the breaking of the rock layers in the earth's crust." This friction releases large amounts of energy and causes vibrations or shocks on the surface of the earth. Earthquakes are natural disasters that cannot be avoided, but their effects can be reduced. Therefore, the community needs to be provided with preparation and an early warning system so that the community can take appropriate and timely action when an earthquake occurs (Sinaga & Lesmana, 2019). A tsunami is a sea wave that occurs due to impulsive disturbances in the sea. This impulsive disturbance occurs due to sudden changes in the shape of the seabed in the vertical or horizontal direction (Rahmadhani et al., 2013).

People who live on the coast are at greatest risk of tsunami disasters. Therefore, the public, especially UNP students, need to be given information about the earthquake and tsunami disaster so that students can take a stand if a disaster occurs. According to experts, it is a kind of readiness to react to an object in certain ways. The readiness in question is a potential tendency to react in a certain way if an individual is faced with a stimulus that requires a response. Attitude measurement can be done by assessing a person's attitude statement. An attitude statement is a series of sentences that say something about the object of the attitude you want to express. This research has one variable, namely the student attitude variable towards the tsunami issue in terms of Q.S Ar-rum verse 41

**METHOD**

This research is quantitative descriptive research which is used to study an event or phenomenon as it is (Sugiyono, 2021). This research will describe the attitudes of UNP students regarding student attitudes towards the issue of the earthquake and tsunami in terms of QS. Ar-rum verse 41. Descriptive statistical analysis uses a percentage formula and is then translated into narrative form. Raw data collected through surveys with questionnaires is included in the data table (Sugiyono, 2015). Then calculate the frequency (f), calculate the percentage (P) of respondents' answers, and calculate the average (mean) of the respondents' answers (Sugiyono, 2021). Followed by classifying the data from the average results of students' attitudes towards mitigating earthquake and tsunami disasters.

**RESULTS AND DISCUSSION**

Results
Table 1. Research Instruments

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Sub-Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ attitudes towards the issue of earthquakes and tsunamis are reviewed from Q.S Ar-Rum verse 41</td>
<td>A. Attitudes towards Earthquakes and Tsunami</td>
<td>1. Earthquakes 2. Tsunamis</td>
</tr>
<tr>
<td></td>
<td>B. Attitudes towards Evacuation Routes and Shelters</td>
<td>1. Horizontal Evacuation Routes 2. Vertical Evacuation Route (Shelter)</td>
</tr>
</tbody>
</table>

Based on the results of distributing questionnaires to UNP students, it was found that the distribution of student respondents was based on sub-indicators as in the following table:

Table 2. Data Grouping Categories

<table>
<thead>
<tr>
<th>No</th>
<th>Percentage of Answers</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80 – 100%</td>
<td>Very Good</td>
</tr>
<tr>
<td>2</td>
<td>66 – 79%</td>
<td>Good</td>
</tr>
<tr>
<td>3</td>
<td>56 – 65%</td>
<td>Not Good</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 55%</td>
<td>Not Good</td>
</tr>
</tbody>
</table>

Table 3. Frequency Distribution of Respondents

<table>
<thead>
<tr>
<th>No</th>
<th>Sub Indicator</th>
<th>SS F</th>
<th>%</th>
<th>S F</th>
<th>%</th>
<th>KS F</th>
<th>%</th>
<th>STS F</th>
<th>%</th>
<th>Average</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Earthquakes</td>
<td>76</td>
<td>28.2</td>
<td>105</td>
<td>39.2</td>
<td>68</td>
<td>25.3</td>
<td>20</td>
<td>7.3</td>
<td>71.84</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>Tsunamis</td>
<td>114</td>
<td>42.7</td>
<td>121</td>
<td>45.0</td>
<td>28</td>
<td>10.4</td>
<td>5</td>
<td>2.0</td>
<td>81.98</td>
<td>Very Good</td>
</tr>
<tr>
<td>3</td>
<td>Horizontal Evacuation Routes</td>
<td>49</td>
<td>18.3</td>
<td>131</td>
<td>48.8</td>
<td>69</td>
<td>25.6</td>
<td>20</td>
<td>7.3</td>
<td>69.47</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>Vertical Evacuation Route (Shelter)</td>
<td>32</td>
<td>12.1</td>
<td>137</td>
<td>51.2</td>
<td>84</td>
<td>31.5</td>
<td>14</td>
<td>5.3</td>
<td>67.50</td>
<td>Good</td>
</tr>
</tbody>
</table>
Discussion

An earthquake is a natural event that cannot be predicted when and where it will occur. Earthquakes can cause damage to the earth’s surface such as the collapse of buildings and human casualties. An earthquake is a genuine vibration from within the earth, originating within the earth which then propagates to the earth’s surface due to cracks in the earth breaking and shifting violently (Agustin, 2014). The causes of earthquakes can be earth dynamics (tectonics), volcanic activity, falling meteors, landslides (under sea level), and nuclear bomb explosions below the earth’s surface (Budiarti & Rahmasari, 2018).

An earthquake is a vibration that occurs as a result of the sudden release of energy accumulated in deformed rocks (Agustin, 2014). Earthquakes are a natural phenomenon that can be caused artificially/as a result of human activities or due to natural events. As a result of these two things, the ground vibrates as an effect of the spreading energy waves radiating from the epicenter/focus. The energy that radiates from the focus is the result of mechanical events (collision, friction, traction) or chemical events (explosion due to chemical reactions), the energy that occurs as a result of these events spreads in all directions in the soil media (Putera et al., 2020).

Humans are the most perfect creatures ever created by Allah SWT. The perfection possessed by humans is a consequence of their function and duties as caliphs on this earth (Syarif, 2017). Creatures created by Allah who have reason and morals are humans as the only creatures on this earth. Human life cannot be separated from nature as a living environment which experts refer to as everything in the heavens and on earth accompanied by plants and animals. Humans are political creatures, social creatures, cultural creatures, linguistic creatures, and speaking creatures (Rosowulan, 2019).

Human life and nature have an interdependent relationship for every need. Humans come from natural matter and the life contained in it, but humans are different from other creatures with a very big difference because of the gifts that Allah has given to them, namely reason and understanding. Because of the subordination of everything in nature to humans, as a mercy and gift from Allah SWT (Harahap, 2016).

In plain view, the environmental crisis experienced by humans today is a direct result of humans’ lack of concern for managing their environment. However, theologically, humans and nature are God’s creations and everything is in a pledge relationship with the God of the universe, namely Allah. As Allah explains in Surah Ar-Rum verse 41 as follows:

"There has been visible damage on land and sea caused by the actions of human hands so that Allah will feel for them some of (the consequences of) their actions so that they return (to the right path)." (QS. Ar-Rum: 41).

The Tafsir of Surah Ar-Rum verse 41 explains the damage that occurred on land and sea. The damage discussed in Tafsir Surah Ar-Rum verse 41 uses the word al-fasad which means a form of violation of the system or law that Allah has established. In the Tafsir of Surah Ar-Rum verse 41, it is explained that al-fasad has occurred on
land and sea. Al-Fasad is any form of violation of the system or law created by Allah, which is translated as "destruction" (Rizkiyah & Erwanto, 2023).

Tafsir Al-Imam Ibnul Qayyim ra: "That what is meant by damage in this verse is shortages and disasters that Allah has caused on the face of the earth due to the disobedience of His servants." This destruction can take the form of polluting nature so that it is no longer suitable for habitation, or even destroying nature so that it can no longer be used. On land, for example, flora and fauna are destroyed, and in the sea, marine biota is destroyed. Also included in al-fasad are robbery, piracy, murder, rebellion, and so on. This destruction occurs due to human behavior, for example, excessive exploitation of nature, war, weapons testing, and so on. This behavior is impossible for a person who believes with true faith because he knows that all his actions will be accounted for later in front of Allah (Dwiyanti et al., 2021).

In this verse, Allah emphasizes that not all of the bad effects of natural destruction are felt by humans, but only some of them. God has overcome some of the other bad consequences, including by providing a system in nature that can neutralize or restore natural damage. Allah created Jinn and humans to worship Him and also gave humans the position of caliph on earth. As caliphs, humans have the task of utilizing, managing, and maintaining (Eliyah, 2018).

As caliphs, humans must follow and obey all of Allah’s laws, including not doing damage to existing natural resources. They must also be responsible for the sustainability of life on this earth. The earth was subdued by God to become a place for humans to live. By appointing humans as caliphs, apart from gaining the right to use what is on earth, they also bear heavy responsibilities in managing it. From this, we can see the Islamic view that the earth is intended for humans (Syarif, 2017).

But humans often neglect their position as caliphs on earth. Their use of nature is often not accompanied by conservation efforts. Some humans’ greed and bad treatment of nature results in damage and misery to humans themselves. However, humans should not treat the earth as they please. This is shown by the words earth (453 times) which are mentioned more often in the Koran than sky or heaven (320 times). This gives a strong impression of the goodness and holiness of the earth (Rosowulan, 2019).

It was found that the attitudes of UNP students for each sub-indicator were different. In the earthquake sub-indicator, the good category is 71.86%. Student attitudes towards the Tsunami sub-indicator were in the very good category, namely 81.98%. Students know the definition of a tsunami and the signs of an earthquake that causes a tsunami as well as the dangers that can be caused by a tsunami. However, not all students know about it and take the same attitude because there are still students whose attitudes are categorized as less good. Student attitudes towards the Horizontal Evacuation Route sub-indicator are categorized as good, namely 66.3%. From the questionnaire given, many students were still confused about the evacuation routes. Some of the students will pass through the horizontal evacuation route Tunggul Hitam–By Pass and will use their vehicles, even though if all the students only passed through this route using vehicles there would be traffic jams. This shows that students need to be given information regarding mitigating horizontal evacuation routes.
Student attitudes towards the Vertical Evacuation Route sub-indicator are categorized as good, namely 67.5%. From the questionnaire given, many students' attitudes were still categorized as less than favorable regarding this evacuation route. Some students consider the horizontal route to be safer, even though this vertical evacuation route will be more effective and save time compared to choosing the horizontal evacuation route. This shows that students also need to be given information about vertical evacuation routes.

CONCLUSION

From the statements above, it can be concluded that there are several sub-indicators of student attitudes towards the possibility of a tsunami that will occur in West Sumatra, especially the city of Padang. The earthquake sub-indicator is in a good category, namely 71.86%. Student attitudes towards the Tsunami sub-indicator were in the very good category, namely 81.98%. Not all students know what the definition of a tsunami is and what the signs are of a potential tsunami. This is what causes differences of opinion regarding these sub-indicators. Student attitudes towards the Horizontal Evacuation Route sub-indicator are categorized as good, namely 66.3%. However, it turns out that there are still many students who are still confused about the evacuation route. Meanwhile, student attitudes towards the Vertical Evacuation Route sub-indicator are categorized as good, namely 67.5%. Based on the results of the research that has been carried out, it can be concluded that the attitude of UNP students regarding student attitudes towards the earthquake and tsunami issue in terms of Q.S Ar-Rum verse 41 is categorized as good, this can be seen from the average percentage of UNP students' answers which is 72.4%.

REFERENCES


