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THE RELATIONSHIP BETWEEN KNOWLEDGE AND EMERGENCY RESPONSE ATTITUDE TO THE MOUNT AGUNG ERUPTION DISASTER

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ABSTRACT
Disaster emergency response is a rapid action to mitigate the impact of a disaster. Therefore, community emergency response is crucial in reducing risk. This requires knowledge and training to enable the community to act appropriately and effectively when a disaster occurs. To determine the relationship between community knowledge and emergency response attitudes regarding the Mount Agung eruption in Tunas Sari Hamlet, Karangasem Regency. This study used a quantitative, correlative analytical approach with a cross-sectional approach, with a sample of 350 respondents selected using a purposive sampling technique. Data collection used a knowledge questionnaire and an attitude questionnaire. The questionnaire for the variables of the level of knowledge and attitudes of the community towards evacuation routes was compiled by researchers based on relevant theories and indicators, then a content validity test (face validity) was carried out through expert judgment by two expert lecturers. Data analysis was descriptive. The Kolmogorov-Smirnov normality test indicated that the data were not normally distributed, therefore the Spearman's Rho test was used. The majority of respondents had good knowledge (67.1%) and moderate emergency response attitudes (64.6%). The Spearman's Rho test showed a significant relationship between knowledge and emergency response attitudes ($p<0.001$) with a correlation coefficient of $r=0.326$, indicating a positive relationship with weak strength. Increased disaster education, training, and routine simulations are recommended to strengthen the community's emergency response skills.

Keywords: community; disaster preparedness; emergency response attitude; eruption disaster knowledge; mount agung

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INTRODUCTION

According to the National Disaster Management Agency (BNPB), Indonesia experienced 3,522 natural disasters in 2022. As a result of these disasters, 851 people died, 8,726 were injured, 46 were missing, and around 5.42 million people suffered and were forced to flee their homes. Based on the 2022-2026 Bali Province Disaster Risk Assessment compiled by BNPB and BPS, there were 494 disaster events during the period 1999 to 2019, including earthquakes, landslides, extreme weather, and volcanic eruptions. Of these incidents, 3,570 people died, 1,221 were injured, 535 were missing, and around 6,942 were forced to evacuate (Badan Nasional Penanggulangan Bencana (BNPB), 2020).

Mount Agung is one of the active volcanoes located in Karangasem Regency, Bali Province. According to data from the Regional Disaster Management Agency (2024) on the Mount Agung eruption contingency plan, Karangasem Regency (2024) is one of the regencies with the largest population in Karangasem Regency, Kubu District, Tianyar Village, with a population of 15,146 people, with 1,515 people exposed, 45 fatalities, 30 people missing, 1,287 people displaced, 76 people relocated, and 76 people injured. The increase in Mount Agung's activity to alert level in 2017 caused considerable anxiety among the surrounding community. The anxiety arose as conflicting rumors spread by word of mouth about the estimated time of Mount Agung's eruption. According to the head of the Center for Volcanology and Geological Hazard Mitigation (PVMBG), the alert issued by the Geological Agency was at the alert level, meaning that residents and tourists

around the mountain were prohibited from conducting activities in the crater area and were required to prepare for emergency response measures.

The community's emergency response in dealing with disasters is necessary to reduce the impact of these disasters. Actions that can be taken include evacuation plans and stockpiling food and water supplies as examples of emergency response. Knowledge and training in disaster management are urgently needed by the community to be able to prevent the impact of disasters. Community participation in disaster risk reduction is influenced by several factors. Factors that influence disaster preparedness include socio-cultural influences, age, gender, ethnicity/race, and socioeconomic status. Factors that certainly influence the level of community knowledge in disaster emergency response include education level and experience, socioeconomic conditions, and age. The income earned by each individual or family generally comes from the work they do (Octaviana, M., & Ramadhani, 2021).

Emergency response to disasters refers to various activities carried out quickly or immediately when a disaster occurs to mitigate the negative impacts that may arise. The emergency response phase is necessary when a disaster occurs, including activities such as rescuing and evacuating victims, property, and protection (Wawomeo et al., 2024). This attitude includes the ability to remain calm, act quickly and appropriately, and coordinate with other parties to minimize the adverse effects of the situation. Disaster emergency response includes various activities carried out quickly or immediately when a disaster occurs to mitigate the negative impacts that may arise (Yuniawatika & Yulistiya, 2022).

According to research conducted by Afik et al., (2021), community preparedness in facing volcanic eruptions is still lacking. In the evaluation of implementation, it was found that some communities do not yet fully understand the importance of preparedness in dealing with volcanic eruptions. One of the efforts made to anticipate the negative impacts of natural disasters such as volcanic eruptions is through disaster mitigation. This is because emergencies can occur anytime and anywhere without exception. According to data from the Disaster Mitigation Education Center (P2MB), disaster mitigation is a series of efforts to reduce disaster risk, both through physical development and awareness and increased capacity to deal with disaster threats. Disaster mitigation is divided into three processes: pre-natural disaster, during natural disaster, and post-natural disaster. These three processes are often referred to as the natural disaster mitigation cycle. The importance of knowledge about disaster mitigation is one of the areas of knowledge that is used continuously because natural disasters can occur anytime and anywhere. Therefore, the community needs basic capital to save themselves from disasters, namely the ability to respond to emergencies and sufficient resources (Yuniawatika & Yulistiya, 2022)

Based on the articles reviewed by the author, it can be concluded that most previous studies were limited to areas outside Bali or only highlighted general knowledge aspects without directly linking them to emergency response attitudes in the context of the Mount Agung eruption. To date, there has been little research specifically examining the relationship between knowledge and emergency response attitudes among communities in disaster-prone areas such as Tunas Sari Hamlet, Karangasem Regency. This indicates an important research gap that needs to be filled in order to understand the extent to which local communities' knowledge can influence their attitudes towards the potential for repeated and widespread eruptions of Mount Agung. This study aims to determine the relationship between knowledge and attitudes toward emergency response to the eruption of Mount Agung in Tunas Sari Hamlet, Karangasem Regency.

METHOD

This study used a correlative quantitative analytical design, which is a type of research that aims to determine the relationship between independent and dependent variables. The approach used was cross-sectional, which is a research method conducted at a specific time, where all data is collected

in a single period to see an overview of the phenomenon occurring at that time. This research was conducted from the beginning of October 2025 to November 2025. This study used a population of 3,840 people in Tunas Sari Hamlet, Karangasem Regency. Sampling in this study used a non-probability sampling method, namely purposive sampling. This technique was chosen because it allowed researchers to deliberately determine respondents based on certain criteria relevant to the research objectives and meeting the inclusion criteria. The inclusion criteria for sample selection were: residing in Tunas Sari Hamlet, Karangasem Regency; aged 17-59 years; able to provide clear answers; able to read and understand Indonesian both verbally and in writing; and respondents who were willing to be respondents and sign an informed consent form. The number of samples used in this study was 350 respondents.

Data collection in this study used questionnaires, with the knowledge level questionnaire consisting of 10 questions, 7 favorable questions and 3 unfavorable questions. The attitude questionnaire used the Physical Activity Questionnaire for Adolescents (PAQ-A) with a Likert scale. The validity test used in this study was face validity, which assesses the extent to which the instrument appears to be capable of measuring what it is supposed to measure. The questionnaire for the variables of the level of knowledge and attitudes of the community towards evacuation routes was compiled by researchers based on relevant theories and indicators, then a content validity test (face validity) was carried out through expert judgment by two expert lecturers. The questionnaire was then administered to respondents via Google Forms. After the data was collected, it was analyzed univariately and bivariately. Univariate analysis in this study was conducted on the variables of knowledge level and community emergency response attitude. Bivariate analysis is data analysis related to the measurement of two variables at a certain time. The statistical test used was Spearman's Rho.

RESULT

Table 1.
Characteristics of respondents based on gender, age, education, and occupation (n=350)

Characteristics	f	%
Gender		
Male	177	50,6
Female	173	49,4
Age		
17-25	100	28,6
26-35	122	34,8
36-45	79	22,6
46-59	49	14,0
Highest Level of Education		
No schooling	16	4,6
Elementary school	25	7,1
Junior high school	52	14,9
Senior high school	186	53,1
College	71	20,3
Employment		
Not working	134	38,3
Self-employed	67	19,1
Private sector	76	21,7
Farmer	38	10,9
Civil servant	35	10,0

Based on the results of a study of 350 respondents, it was found that the characteristics of the respondents were dominated by 177 men (50.6%) and 173 women (49.4%), so that the composition of the two genders was relatively balanced without any significant dominance. In terms of age, the largest age group was 26–35 years old (34.8%), followed by 17–25 years old (28.6%), 36–45 years old (22.6%), and the least number of respondents were aged 46–59 years old (14.0%), which shows that the majority of respondents were of productive age and therefore had a better ability to understand and respond to the research. In terms of highest level of education, most respondents

had a high school education (53.1%), followed by college (20.3%), junior high school (14.9%), elementary school (7.1%), and no schooling (4.6%), indicating that respondents had a sufficient level of literacy to understand the research. Based on occupation, respondents with unemployed status had the largest number, namely 134 people (38.3%), followed by private sector employees with 76 people (21.7%), entrepreneurs with 67 people (19.1%), farmers with 38 people (10.9%), and civil servants with 35 people (10.0%). Overall, these characteristics illustrate that the respondents were quite diverse in terms of demographics, but were still dominated by the productive age group and those with a secondary education, enabling them to contribute optimally to the research data.

Table 2.
Frequency Distribution of Knowledge on Emergency Response to Volcanic Eruptions (n=350)

Variable	f	%	Median	Min.	Maks.
Knowledge			8,00	4	10
Good	235	67,1			
Fair	101	28,9			
Poor	14	4,0			

Based on table 2 of the 350 respondents, it is known that the majority's level of knowledge is good, with 235 people (67.1%), while moderate knowledge is found in 101 people (28.9%) and poor knowledge is only found in 14 people (4.0%). The mean value of the knowledge variable was 8.07, the median value was 8.00, the minimum value was 4, and the maximum value was 10. These data show that most respondents have a good understanding of emergency response and are expected to be able to apply this knowledge in real situations. High knowledge can be influenced by various factors such as education level, access to information, experience, and a social environment that supports the learning process.

Table 3.
Frequency distribution of emergency response attitudes to volcanic eruptions (n=350)

Variable	f	%	Median	Min.	Maks.
Attitude			38,00	24	50
Good	115	32,9			
Fair	226	64,6			
Poor	9	2,6			

Based on the results of the analysis of respondents' attitudes, it shows that most of them have a fairly positive attitude towards emergency actions, namely 226 respondents (64.6%), followed by 115 respondents (32.9%) who have a good attitude, and only 9 respondents (2.6%) who have a less positive attitude. The mean value was 38.44, the median value was 38.00, the minimum value was 24, and the maximum value was 50. These findings indicate that although respondents have good knowledge, most of them still have a moderate attitude, so it is still necessary to improve their attitude to be more positive through education, training, and simulations related to emergency response actions.

Table 4.
Crosstabulation of the Relationship between Knowledge and Emergency Response Attitudes to the Mount Agung Eruption (n=350)

			Community Attitudes Category			Total
			Good	Pair	Poor	
Knowledge Level Category	Good	f	94	139	2	235
		%	40,0	59,1	0,9	100,0
	Pair	f	19	76	6	101
		%	18,8	75,3	5,9	100,0
	Poor	f	2	11	1	14
		%	14,3	78,6	7,1	100,0

Based on the results of table 4, it is known that the majority of the community in Tunas Sari Hamlet, Karangasem Regency, namely 235 respondents, have a good level of knowledge about emergency response to the eruption of Mount Agung. Of these, most showed a sufficient attitude and followed the emergency response, namely 139 respondents (59.1%). while in the group of respondents with moderate knowledge, 101 respondents, the majority had an adequate attitude, 76

respondents (75.2%), 19 respondents (18.8%) had a good attitude, and 6 respondents (5.9%) had a poor attitude. In the group of respondents with low knowledge levels, 14 respondents (7.4%) had adequate attitudes, 11 respondents (78.6%) had good attitudes, and 2 respondents (14.3%) had poor attitudes.

Table 5.
Relationship Between Knowledge and Emergency Response Attitudes Towards Volcanic Eruptions (n=350)

	Spearman's Rho	
	Emergency Response	
	r	*p-value*
Knowledge Variable	0,326	< 0,001

Based on the results of the analysis using Spearman's Rho correlation test, the correlation coefficient between knowledge and emergency response attitudes was 0.326 with a significance value of $p < 0.001$. A significance value well below 0.05 indicates that there is a statistically significant relationship between the two variables. Thus, it can be concluded that an increase in respondents' knowledge is associated with an increase in their attitudes towards emergency response. Where $r = 0.326$ indicates that the relationship formed is in the category of a positive relationship with a weak relationship strength.

DISCUSSION

Respondent Characteristics

Based on the research results by gender, it is known that the characteristics of respondents were dominated by 177 males and 173 females, so the composition between the two genders was relatively balanced without any significant dominance. According to Firman et al., (2024), men in the context of disasters often play a role in the family mobilization process, especially in evacuation decision-making. Meanwhile, research by Rinaldy, (2024) shows that women have a higher level of alertness because they hold responsibility for children and vulnerable family members. This is because at the time of the study the female respondents were working, so male respondents who had more free time at home were able to take the time to participate in the research by filling out the questionnaires provided.

In terms of age, the largest age group was in the range of 26–35 years and the smallest was 46–59 years, indicating that the majority of respondents were of productive age and therefore had better ability to understand and respond to the research. The more mature a person is in thinking and acting in terms of societal values, the more mature their level of maturity and resilience. From the perspective of last education level, most respondents had a high school education, while the smallest group was those with no schooling, indicating that respondents had a fairly good level of literacy to understand the research. According to (Alim et al., 2020), the introduction of disaster education is expected to increase public awareness of natural disasters. The importance of communication in the warnings delivered can be understood and well received, so that the community can better understand what needs to be done. It can be concluded that most respondents have a relatively good level of education. Education level influences knowledge and emergency response attitudes of the community. Respondents with higher education tend to have greater knowledge and good emergency response attitudes in dealing with the impact of volcanic eruptions.
Based on occupation, respondents with unemployed status had the largest number, followed by those employed, with civil servants (PNS) being the smallest group. In addition, according to (Ramdani, 2022), occupation affects the level of preparedness because the work environment often becomes an important space for the dissemination of mitigation information. The dominance of the unemployed group needs more attention through easily accessible community-based training.

Knowledge about Emergency Response to the Mount Agung Eruption Disaster

The research results show that the highest majority level of knowledge falls into the good category, while the lowest level of knowledge is in the poor category. Most respondents were able to answer

positive questions correctly, including almost all questions related to the concepts of objectives, first aid, disaster prevention methods, disaster information, and disaster simulations. These questions were answered correctly by respondents, indicating that the community in Tunas Sari Hamlet has a strong understanding of disaster emergency response. However, several negative questions containing tricky concepts regarding the signs of an eruption disaster were still answered incorrectly by some respondents. This indicates that there are still community members who need strengthened understanding, especially regarding the signs of an eruption disaster. According to Lestari et al., (2023), good knowledge is obtained from information delivered through mass media, electronic media, health workers, poster media, and close relatives, thereby fostering an emergency response attitude in facing volcanic eruptions. According to Mardiatno et al., (2020), good knowledge of disaster signs will increase community preparedness to always prepare sufficient basic necessities at home such as food, medicine, and clothing. Maintaining good knowledge is supported by the role of the Regional Disaster Management Agency in providing information gradually to communities living in areas prone to volcanic eruption exposure.

This is in line with research conducted by Amestiasih et al., (2021) titled "Knowledge and Preparedness of the Academic Community in Facing Volcanic Eruption Disasters at Campus II of Respati University Yogyakarta," which was categorized at a high level. Furthermore, students' knowledge was in the moderate and low level categories. The high percentage of correct answers on knowledge indicators shows that students already have a good basic understanding of disaster education, which provides an overview of the readiness and knowledge of the academic community in facing similar disaster threats. These findings are consistent with research by Yatnikasari et al., (2020), which states that communities must actively prepare themselves to face disaster risks through early actions and adequate knowledge. Knowledge influences a person's attitudes and behavior in anticipating disasters.

Attitudes Toward Emergency Response to the Mount Agung Eruption Disaster

Based on the analysis of respondents' attitudes, it shows that the majority have a moderate attitude toward emergency actions, and the smallest group falls into the poor attitude category. These findings indicate that although respondents already have good knowledge, most are still at a moderate attitude level, so there is still a need to improve the development of more positive attitudes through education, training, and simulations related to emergency response actions. This study is in line with research conducted by Angir et al., (2022), which states that preparedness in facing the risk of volcanic eruption disasters among high school students is in the ready category. The theory proposed by LIPI UNESCO/ISDR, in accordance with the research results, states that knowledge is a very important factor for the preparedness of a school community.

Emergency response is carried out to anticipate the possibility of disasters in order to avoid casualties, property losses, and changes in the structure of community life (Badan Nasional Penanggulangan Bencana (BNPB), 2020). Communities that have an emergency response attitude are prepared to face volcanic eruptions based on having good knowledge of the signs of a volcanic eruption disaster, so respondents are always alert to evacuate at any time. Based on several theoretical findings and research results, the researcher analyzes that the emergency response attitude possessed by the community is influenced by the level of knowledge and also experience. Although the community's level of knowledge falls into the good category, the community's attitude toward emergency response is in the moderate category; therefore, simulations are needed for the community in the event of a volcanic eruption, such as conducting evacuations, providing sufficient food and clothing during evacuation, and using masks as personal protective equipment to avoid volcanic ash.

The Relationship of Knowledge with Emergency Response Attitudes toward the Mount Agung Eruption Disaster

Based on the results of the Spearman's Rho statistical test conducted to analyze the relationship between the variable Knowledge about volcanic eruption disasters and Emergency Response Attitudes, it shows a statistically significant relationship, meaning there is a meaningful association between the two variables. The strength of the relationship is categorized as weak, with a positive (direct) direction. This indicates that an increase in respondents' level of Knowledge tends to be followed by an increase in their Emergency Response Attitudes toward volcanic eruption disasters, and vice versa. This knowledge is very closely related to the level of education, where it is expected that someone with a higher level of education will have broader knowledge regarding disaster emergency response. Education influences the learning process; the higher a person's education, the easier it is for them to receive information. With higher education, a person will tend to obtain information, both from other people and from mass media.

The results of this study are consistent with research conducted by Sugara et al., (2018) on "The Relationship between Knowledge and Community Preparedness Attitudes in Facing the Eruption of Mount Kelud in the Mitigation Phase," which showed a significant relationship between the level of knowledge and preparedness attitudes. The analysis results found significant differences in knowledge levels in relation to preparedness attitudes. The results of this study are in agreement with research conducted by Minggawati et al., (2017), proving that the community was able to carry out self-rescue by evacuating to safe places and consistently using personal protective equipment such as masks during the 2014 volcanic eruption. This was inseparable from good knowledge about self-rescue procedures, which fostered the attitude to evacuate.

According to Fadilah et al., (2024), knowledge is the main factor in disaster preparedness. Disaster experiences that have affected several regions in Indonesia have provided valuable lessons about the importance of disaster knowledge. In addition, the presence of knowledge influences attitudes and concern related to disasters, especially in disaster-prone areas. This study is in line with research by Artini et al., (2022) on "The Relationship Between the Level of Disaster Preparedness Knowledge Among Health Workers and Disaster Preparedness Attitudes," which revealed that good knowledge influences the level of preparedness possessed by individuals or other groups. This study shows similarities in results with previous studies, which also examined disaster knowledge but in different locations, with the finding that the majority of heads of households had good disaster knowledge.

Based on the research results and previous findings, it can be concluded that knowledge makes a significant contribution to improving community emergency response attitudes toward volcanic eruption disasters. Therefore, efforts to enhance disaster education, disseminate accurate information, and conduct emergency response training activities become strategic steps in building a community that is more alert and responsive to disaster threats. Knowledge and attitude have a very close relationship. Knowledge becomes the main foundation in the formation of a person's attitude. Individuals who have a good understanding of emergency response show more positive attitudes toward the emergency response phase, because attitudes are influenced by the information and understanding they have regarding disaster emergency response.

CONCLUSION

There is a relationship between knowledge and emergency response attitudes toward the Mount Agung eruption disaster in Tunas Sari Hamlet, Karangasem Regency, with a weak relationship strength and a positive direction, which means that the higher the community's knowledge about emergency response, the better the community's emergency response attitude in following the emergency response phase when a disaster occurs.

REFERENCES

Afik, A., Khoriyati, A., & Pratama, I. Y. (2021). Tingkat Kesiapsiagaan Masyarakat Dibidang Kesehatan Dalam Menghadapi Dampak Erupsi Gunung Berapi. Jurnal Kesehatan Mesencephalon, 7(1).

Alim, A. N. A. H., Rahmayanti, H., Husen, A., Ichsan, I. Z., Marhento, G., Alamsyah, M., Babu, R., & Rahman, M. M. (2020). Environmental Disaster Education at University: An Overview in New Normal of COVID-19. Online Submission, 2(8), 714–719.

Amestiasih, T., Rahil, N. H., & Anwar, K. (2021). The Overview of Youth Preparedness In Facing Earthquake Disasters At Padukuhan Sindet, Trimulyo, Jetis, Bantul. Jurnal Keperawatan Respati Yogyakarta, 8(2), 122–124.

Angir, A. J., Wariki, W. M. V., & Rombot, D. V. (2022). Gambaran kesiapsiagaan siswa SMA Lokon St. Nikolaus Tomohon terhadap bencana erupsi gunung berapi. Jurnal Kedokteran Komunitas Dan Tropik, 421–428.

Artini, B., Mahayaty, L., Prasetyo, W., & Yunaike, F. (2022). Hubungan tingkat pengetahuan kesiapsiagaan bencana pada tenaga kesehatan dengan sikap kesiapsiagaan bencana. Jurnal Keperawatan, 11(2), 1–8.

Badan Nasional Penanggulangan Bencana (BNPB). (2020). Profil Risiko Bencana Indonesia.

Fadilah, M., Maryani, E., Riandi, R., & Permanasari, A. (2024). Faktor-faktor kesiapsiagaan bencana terintegrasi pengetahuan prekursor gempa bumi pada mahasiswa Pendidikan IPA. Jurnal Pendidikan Geografi: Kajian, Teori, Dan Praktek Dalam Bidang Pendidikan Dan Ilmu Geografi, 26(1), 1.

Firman, R. L., Novantara, P., & Mariany, A. (2024). Peran Perempuan Dalam Pemanfaatan Konsep Citizen Science Dalam Upaya Pengurangan Risiko Bencana Berbasis Partisipasi Masyarakat. Journal of Innovation and Sustainable Empowerment, 3(2), 134–146.

Lestari, E., Anggraeni, T., Sunarno, R. D., Saputro, B. S. D., & Herbasuki, H. (2023). Hubungan Pengetahuan Tentang Tanggap Darurat Dengan Tingkat Kesiapsiagaan Bencana Erupsi Merapi Di Desa Wonodoyo: Knowledge Relationship On Emergency Response With Eruption Preparedness Of Merapi In Wonodoyo Village. Jurnal Keperawatan GSH, 12(1), 6–14.

Mardiatno, D., Malawani, M. N., & Nisaa, R. M. (2020). The future tsunami risk potential as a consequence of building development in Pangandaran Region, West Java, Indonesia. International Journal of Disaster Risk Reduction, 46, 101523.

Minggawati, Z. A., Supriyono, G. A. P., & Halimatusyadiah, H. (2017). Pengetahuan Masyarakat Tentang Kesiapsiagaan Bencana Tanah Longsor Di Desa Cikahuripan Kecamatan Lembang Kabupaten Bandung Barat. Jurnal Ilmiah JKA (Jurnal Kesehatan Aeromedika), 3(1), 92–99.

Octaviana, M., & Ramadhani, D. (2021). Peran Pengetahuan dalam Meningkatkan Kesadaran Bencana di Masyarakat. Jurnal Pendidikan Dan Kebudayaan, 26(3), 212–219.

Ramdani, R. T. (2022). Hubungan Pengetahuan, Masa Kerja, Dan Pelatihan Kebakaran Dengan Kesiapsiagaan Tanggap Darurat Kebakaran Pekerja di PT. Aneka Tambang Bogor.

Rinaldy, M. (2024). Strategi Ketahanan Keluarga Responsif Gender Di Kecamatan Karanganyar, Kabupaten Karanganyar.

Sugara, A. S., Kusuma, F. H. D., & Sutriningsih, A. (2018). Hubungan pengetahuan dengan sikap kesiapsiagaan masyarakat menghadapi erupsi gunung kelud pada fase mitigasi. Nursing News: Jurnal Ilmiah Keperawatan, 3(1).

Wawomeo, A., Cahyani, S. L., Gonsalves, D., Tokan, P. K., Blasius, G., Wuan, A. O., & Budiana, I. (2024). Tanggap Darurat Bencana Erupsi Gunung Lewotobi Laki-Di Kabupaten Flores Timur. PAKDEMAS: Jurnal Pengabdian Kepada Masyarakat, 4(1), 83–90.

Yatnikasari, S., Pranoto, S. H., & Agustina, F. (2020). Pengaruh Pengetahuan dan Sikap Terhadap Kesiapsiagaan Kepala Keluarga dalam Menghadapi Bencana Banjir. Jurnal Teknik, 18(2), 135–149.

Yuniawatika, Y., & Yulistiya, D. (2022). Sosialisasi tanggap bencana gempa bumi untuk anak sekolah dasar. Abdimas Pedagogi: Jurnal Ilmiah Pengabdian Kepada Masyarakat, 5(2), 65–71.