

Original Research Article

RELATIONSHIP BETWEEN LEVEL OF DISASTER KNOWLEDGE AND ATTITUDE OF EARTHQUAKE DISASTER PREPAREDNESS IN CIVITAS ACADEMIC OF KERTA CENDEKIA HEALTH POLYTECHNIC

Dini Prastyo Wijayanti^{1*}, Tamara Nur Budiarti¹

¹Kerta Cendekia Health Polytechnic

*Correspondence:

Dini Prastyo Wijayanti

Emergency Nursing Department,
Kerta Cendekia Health
Polytechnic, Sidoarjo, East Java
Province, Indonesia

Lingkar Timur Road, Rangkah
Kidul Village, Sidoarjo District,
East Java, Indonesia – 61232

Email: dinipw@gmail.com

Abstract

Background: Disaster preparedness is a habit that we must cultivate in order to safeguard ourselves, people around us, and the environment. Indonesia in high-earthquake zones require well-established plans for dealing with the damage brought on by earthquakes.

Objectives: The aim of this research to see the relationship between the level of disaster knowledge and attitudes of earthquake disaster preparedness in Civities Academic of Kerta Cendekia Health Polytechnic.

Methods: This research used a descriptive correlational study design with a cross sectional approach. The population in this study was conducted in Kerta Cendekia Health Polytechnic, totaling population of civities academic were 238 people. The sampling technique used is simple random sampling technique with a sample of 70 respondents. The data were processed using the Spearman statistical test.

Results: The result of research was mostly 44 respondents (63%) very high level of knowledge on earthquake preparedness, 48 respondents (68%) classified very good of attitudes on earthquake preparedness. The results of statistical tests of knowledge with attitudes of earthquake preparedness had significant relationship p-value 0,610.

Conclusion: There is a relationship between level of disaster knowledge and attitude of earthquake disaster preparedness in civities academic of Kerta Cendekia Health Polytechnic. By taking part in disaster mitigation training, Kerta Cendekia Health Polytechnic can learn how to handle disasters effectively. So that people can take action to protect themselves against preparedness of disaster management, which will improve their quality of life and save their lives.

Keywords: Knowledge, Disaster Preparedness

INTRODUCTION

Disasters entail significant societal upheaval that results in significant societal

harm. Japan, New Zealand, Indonesia, and many other nations that have experienced natural disaster are some of the nations that are

frequently affected by natural disasters, particularly earthquakes. Geographically, Indonesia is situated where the tectonic plates of the planet collide (Latupeirisa, 2020).

Indonesia is prone to disasters. Indonesia is a country that is geographically situated on three tectonic plates, including the Indo-Australian plate, and is situated on two continents and two oceans. The Pacific Plate and the Eurasian Plate Indonesia is one of the nations that has suffered from severe natural disasters. Indonesia sets several positions where disasters frequently occur and to lessen their impact, according to the 2010 Asia Pacific Disaster Report (Mc Clean, 2010).

According to the Central Statistics Agency's BPS records (2021), the nation had 10,519 frequent earthquakes in 2021. When compared to the 8,368 earthquake frequencies of the previous year, this number has increased by 25.7%.

Disaster preparedness is a habit that we must cultivate in order to safeguard ourselves, people around us, and the environment (Pasaribu, 2020). Countries in high-earthquake zones require well-established plans for dealing with the damage brought on by earthquakes. Skills, abilities, and knowledge disasters management are crucial in this context. A disaster safety unit at Kerta Cendekia Health Polytechnic undertakes outreach efforts and educates the entire academic community in order to support "Tangguh Bencana" government program in East Java.

The program increase knowledge about disaster management once a year for all civities academic. The aim of this research to see the relationship between the level of disaster knowledge and attitudes of earthquake disaster preparedness in Civities Academic of Kerta Cendekia Health Polytechnic.

METHODS

This research employs a cross-sectional, descriptive correlational research design. This study was conducted in November 2022 at the Kerta Cendekia Health Polytechnic. Civities Academic Kerta Cendekia Health Polytechnic

made up the research population. Using a simple random sampling technique, the sample size for this research was chosen using the Slovin formula with an error rate of 10% (0.1).

Seventy respondents made up the study's samples. Both knowledge and preparation surveys were questionnaires in the research. The statistical test Spearman is used to process data. The ethics committee approval was obtained Kerta Cendekia Health Academic (No. 351/PDII/KC/XI/2022).

RESULTS

Table 1. Characteristics of Respondents

Characteristics	n	%
Sex		
Man	15	21
Woman	55	79
Age		
18-28ears old	58	83
29-39 years old	5	7
40-50 years old	2	3
>50 years old	5	7
Education		
Elementary School	3	4
Senior High School	57	81
Bachelor	4	6
Magister	6	9
Occupation		
Lecture	6	9
Staff of Academic	7	10
Student	52	74
Security	1	1
Cleaning Service	2	3
Driver	2	3
Training of Management Disaster		
Ever	47	67
Never	23	33

Source: Primary Data, 2022

Based on Table 1, the results of the distribution of respondents were mostly women, 55 people (79%). Most of the respondents aged 18-28 years old years as many as 58 people (83%). The level education of was senior high school mostly 57 respondents (81%). Almost student 52 respondent (74%). Mostly 47 people of civitas academic had training management (67%).

Table 2. Distribution of Respondents Level of Knowledge on Earthquake Disaster Preparedness

Level of Knowledge	n	%
High	26	37
Very High	44	63
Total	70	100

Source: Primary Data, 2022

Civitas academic for disaster relief have a high (37%) and very high (63%) level of knowledge. The data to show that civitas academic Kerta Cendekia Health Polytechnic have solid knowledge of disaster preparedness.

Table 3. Distribution of Attitude of Earthquake Disaster Preparedness

Attitude of earthquake disaster preparedness	n	%
Good	22	31
Very good	48	69
Total	70	100

Source: Primary Data, 2022

According to Table 3, participants' attitudes on being prepared for earthquakes fell into two categories, including good (31%) and very good (69%).

Table 4. Relationship between level of knowledge and attitudes towards earthquake preparedness

Variabel	p-value	Spearman correlation
Level of knowledge and attitude of disaster earthquake preparedness	0.000	0.610

Source: Primary Data, 2022

There is a relationship between the variable level of knowledge and the attitude of preparedness for earthquake. The positive Spearman correlation value indicates that people are more prepared for a earthquake disaster the more knowledgeable they are about how to prepare for one.

DISCUSSION

Based on data Civities Academic had training of disaster management. It can be increase of level of knowledge and attitude. Mostly 63 % level of knowledge very high in Kerta Cendekia Health Polytechnic. Due to the rising frequency of disasters worldwide, nurses

must be appropriately prepared to respond to disasters in order to lessen their damaging effects on the population that is impacted (Labrague, 2018).

Age and education level in this study both supported by good knowledge. The majority of civities academic in Kerta Cendekia Health Polytechnic for the disaster were between the ages of 18 and 28 (83%), These findings that productive age. A population in the productive age range (15–64 years) is one that is capable of producing goods and services to meet both their own needs and the requirements of the community (Alim, 2015).

According Devi (2015) An exploratory study was carried out to evaluate the knowledge and practices of disaster management among 540 secondary school teachers in a few schools in Pune, India. Only 7.22% of teachers in the research received a good score. There is a severe lack of knowledge and practices among teachers, as evidenced by the average knowledge score of 15.9 (53%) and average practice score of 7.05 (47%).

Every person needs to be aware of earthquakes and know how to protect themselves in emergency situations. Higher or lesser knowledge will then be compared to the influence of an insider's conduct or attitude (Budimanto,2017). People's lack of experience can also affect the mindset they adopt. If they lack knowledge of the disaster, they may not know how to reduce the risk of it happening (Riska, 2022)

Disaster management and prior disaster response experience are two factors that improve preparedness for disaster response. However, it is often believed that nurses lack adequate preparation and lack the confidence necessary to react to disasters successfully (Labrague, 2018).

Because attitudes are influenced by cognitive development, knowledge and attitudes cannot be separated. A person's mental process can improve with increased knowledge, allowing initiatives to arise to set the skills learned to use (Daud et. al, 2014).

CONCLUSION

There is a relationship between level of disaster knowledge and attitude of earthquake disaster preparedness in civities academic of Kerta Cendekia Health Polytechnic. One of the natural events that affects life is an earthquake. so that people can take action to protect themselves against preparedness of disaster management, which will improve their quality of life and save their lives.

To empower the civities academic in disaster preparedness, Kerta Cendekia Health Polytechnic can collaborate with BPBD and other organizations and actively conduct education, inspiration, and other trainings.

SUGGESTIONS

Regarding the impact of training on attitude of earthquake disaster preparedness in civities academic, more research can be done. By taking part in disaster mitigation training, Kerta Cendekia Health Polytechnic can learn how to handle disasters effectively.

ACKNOWLEDGMENT

Thanks to Kerta Cendekia Health Polytechnic for supporting this study.

DECLARATION OF CONFLICTING INTEREST

No conflict of interest has been declared by the authors.

FUNDING

This work was financial support for the publication article by Kerta Cendekia Health Polytechnic.

AUTHOR CONTRIBUTION

Author 1:

The main conceptual ideas and proof outline wrote the manuscript.

Author 2:

Technical editing and writing manuscript and helped different information.

ORCID

Author 1:

Dini Prastyo Wijayanti

<https://orcid.org/000-0001-7948-5765>

Author 2:

Tamara Nur Budiarti

<https://orcid.org/0000-0003-4316-8682>

REFERENCES

- Alim, S., Kawabata, M., & Nakazawa, M. (2015). Evaluation of disaster preparedness training and disaster drill for nursing students. *Nurse education today*, 35(1), 25-31.
- Budimanto, Mudatsir, & Tahlil, T. (2017). Hubungan Pengetahuan, Sikap Bencana Dan Keterampilan Basic Life Support Dengan Kesiapsiagaan Bencana Gempa Bumi Pada Mahasiswa Keperawatan Poltekkes Banda Aceh. *Ilmu Kebencanaan*, 4(2), 53– 58
- BPS Jawa Timur. 2021. Jumlah Kejadian bencana di Jawa Timur. <https://jatim.bps.go.id>
- Daud, R., Sari, S.A., Milfayetty, S., dan Dirhamsyah, M. 2014. Penerapan Pelatihan Siaga Bencana dalam Meningkatkan Pengetahuan, Sikap dan Tindakan Komunitas SMA Negeri 5 Banda Aceh. *Jurnal Ilmu Kebencanaan (JIKA)* 1, 26-34.
- Devi, A. W., & Sharma, D. (2015). Awareness on earthquake preparedness: A key to safe life. *International Journal of Nursing Research and Practice*, 2(2), 1-6.
- Latupeirisa, V. P. S. (2020). Level of earthquake disaster preparedness and its integrity in natural science learning: A literature review. In *Journal of Physics: Conference Series* (Vol. 1440, No. 1, p. 012093). IOP Publishing
- Labrague, L. J., Hammad, K., Gloe, D. S., McEnroe-Petitte, D. M., Fronda, D. C., Obeidat, A. A., ... & Mirafuentes, E. C. (2018). Disaster preparedness among nurses: a systematic review of literature. *International nursing review*, 65(1), 41-53
- McClellan D, (2010) *World Disasters Report 2010: Focus on Urban Risk* (Geneva, Switzerland: International Federation of Red Cross and Red Crescent Societies) pp 35-202

Pasaribu, F. R., & Perangin-angin, M. A. (2020). Pengetahuan dan Sikap Siswa SMA dalam Menghadapi Bencana Gempa Bumi. *The Indonesian Journal of Health Science*, 12(1), 76-82.

Riska, A. (2022). Hubungan Tingkat Pengetahuan dan Sikap dengan Kesiapsiagaan Bencana Gempa Bumi Pada Mahasiswa Kesehatan di Universitas Andalas Angkatan 2021 (Doctoral dissertation, Universitas Andalas).

Cite this article as: Wijayanti, D.P. and Budiarti, T.N. (2022). Relationship Between Level of Disaster Knowledge and Attitude of Earthquake Disaster Preparedness in Civitas Academic of Kerta Cendekia Health Polytechnic. *International Conference of Kerta Cendekia*, 2 (1), 51-55.