



## Nurse Leadership in Disaster Preparedness in 5 Community Health Centers in the Ende Regency City

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### ABSTRACT

Nurses have a very strategic role in reducing risk. This research aims to determine the relationship between nurse leadership and disaster preparedness. The research design used in this research is descriptive analytic with a cross sectional approach. This research was carried out at the Community Health Center from January to October 2023. The population in this study were all nurses at the Ende Regency. Sampling was taken using a non-probability sampling technique, namely purposive sampling. Data were processed using SPSS software in two stages, namely descriptive analysis and bivariate analysis. The research results show that leadership is in the good category with a p value (0.90). Nurses in general are not prepared to be leaders, especially in disaster preparedness

## **INTRODUCTION**

Indonesia is one of the countries with a fairly high risk of threats to various types and forms of disasters, both natural disasters such as earthquakes, volcanic eruptions, tsunamis, floods, landslides, fires and others as well as non-natural disasters such as disease outbreaks (rabies, malaria). and Covid 19) This is because geographically Indonesia is located between the large plates of Indo-Australia and Eurasia (Anggun et al., 2020)

A disaster is defined as a situation or event that exceeds the capacity of society, thus requiring a request for external assistance at the national or international level. According to the World Health Organization (WHO), a disaster can be said to be any event that causes ecological disruption, damage, loss of human life, or worsening of health status or health services on a certain scale that requires a response or assistance from outside the affected community or affected area. (Darmawan et al., 2020)

Disasters are usually associated with serious physical, mental, environmental and economic crises for the vulnerable populations affected. There are many events throughout the world that cause severe financial, physical and psychological losses. (Usher & Mayner, 2011). Disasters cause various forms of suffering in society (physical, mental, infrastructure and others) which cause enormous material and human losses (Beccario & Asia, 2015). The high risk of disasters in Indonesia requires that all people must be able to understand disaster management. Disaster management is defined as all efforts or activities carried out in the context of prevention, mitigation, preparedness, emergency response and recovery efforts related to disasters carried out at the stages before, during and after a disaster. (Tyas, 2016). Disaster management does not only start after a disaster occurs. Activities before a disaster occurs (pre-disaster) in the form of prevention, mitigation (impact reduction) and preparedness activities are very important to reduce the impact of a disaster (Erita et al., 2019). According to the United Nations, there are 9 frameworks for action against disasters, namely vulnerability assessment, planning (disaster prevention), organization, information systems, resource collection, alarm systems, action mechanisms, population education and training, and dress rehearsals. (Erita et al., 2019).

The Preparedness Phase is a phase where good preparation is carried out by considering various actions to minimize losses incurred as a result of a disaster and preparing plans so that we can carry out effective relief and maintenance activities when a disaster occurs. Preparedness is actions that enable governments, organizations, society, communities and individuals to be able to respond to a disaster situation quickly and effectively. (Rina Susanti, Sri Adelila Sari, Sri Milfayetty, 2014). Preparedness is the activities and preparedness steps implemented to anticipate the possibility of a disaster in order to avoid casualties, loss of property and changes in the way of life of the community. (Tyas, 2016).

Nurses are health workers with the largest population and have a strategic role in disaster management, one of which is a leadership role in nursing services. Nurses can play a leadership role in various settings such as in hospitals, in evacuation centers, in mobile clinics or in community health centers (Tyas, 2016). It has been widely reported that nurses around the world play a critical role in

disaster response and have done so since the profession's inception (Turale, 2014). The nursing profession is flexible and covers all conditions, where nurses are not only limited to providing care in hospitals but are also required to be able to work in disaster response preparedness conditions. The handling situation between the alert state and the normal state is very different, so nurses must be able to skillfully and technically deal with conditions like this (Putra et al., 2015).

Leadership in the disaster phase is coercive, authoritative, democratic, pace-setting, coaching. A nurse's success as a leader depends on her ability to apply a certain style at the right time to specific conditions. Various leadership styles are not necessarily owned by one nurse, therefore it is necessary to develop a joint leadership system that will accommodate various leadership styles from various individuals. Each individual will be equipped according to their strengths, so that it will increase the effectiveness of each phase of disaster management (Putra et al., 2015)

Based on Farly Ihsan's research results (Ihsan et al., 2022) in his literature review, the 12 articles analyzed showed that the majority of nurses were not prepared to face disasters with a range of 46.5% - 97.5%. Based on Hodge's research (Hodge et al., 2013) that as many as 44.6% of nurses lacked disaster preparedness. Apart from that, according to research by Martono, et al (Martono et al., 2018) that in general the nurses surveyed in the research were less prepared to face disasters, and did not understand their role both in the disaster preparedness phase and in dealing with post-disaster situations, while the research Yan, dk (Yan et al., 2015) nurses are educationally and psychologically unprepared for their disaster work.

The Ende Regency Regional Disaster Management Agency-BPBD released that there were 4 disaster events that occurred from January to September 2020. These disasters consisted of natural and non-natural disasters including, long drought and drought, 12 pests and strong winds, landslides and flooding occurred 5 times, then abrasion or large waves accompanied by strong winds 3 times and fire 3 times. Apart from that, in 2021 the Ende Regency Regional Disaster Management Agency (BPBD) reported that one resident, Ende Regency, East Nusa Tenggara Province died as a result of being swept away by flood currents. This is of course a concern for health workers, in this case nurses, to maximize their role and function in disaster preparedness.

Based on several articles obtained, preparedness is only focused on nurses in hospitals, while in disaster management nurses can be in various places such as hospitals, evacuation centers, mobile clinics or community health centers (Tyas, 2016) The role of nurses at community health centers when a disaster occurs is to care for minor patients, administer minor medications, and refer patients. Meanwhile, the functions and duties of nurses in disaster situations can be described according to the phases and circumstances that apply when a disaster occurs (Tyas, 2016).

There are various efforts made by the government to reduce disaster risks, such as conducting strategy studies and communicating with disaster-prone communities through coercive, informative, canalizing, educative, persuasive and redundancy techniques in packaging messages in the form of instructions,

appeals to the community to jointly carry out mitigation efforts. disaster. The efforts made by the government have not yet maximized mitigation efforts. There are still many people who have not done what the government directed them to do (Sembiring & Nena Meo, 2020). These efforts still require support such as involving all components of society in reducing disaster risk, including the support of nursing staff who directly communicate and interact with the community. (Kemenkes RI, 2020). The study of the determinants of factors related to the preparedness of community health center nurses is one of the strategic studies as an effort to reduce disaster risk in the community. Nursing staff are one of the figures who have influence, their attitudes and behavior are heard and imitated by all elements of society. This study aims to identify nurse leadership and its relationship with nurse preparedness in 5 community health centers in the city of Ende Regency, East Nusa Tenggara Province..

## **LITERATURE REVIEW**

### **1. Disaster Management**

Disaster management is a series of efforts that include establishing development policies that are at risk of disasters, disaster prevention activities, emergency response and rehabilitation. In disaster management, activities also follow the disaster cycle, namely (Tyas, 2016)

- a. Pre-Disaster Phase; is referred to as the preparedness phase which consists of prevention and mitigation.
- b. Disaster Phase; referred to as the emergency response phase (response) which consists of an acute phase (acute phase) and a sub-acute phase (sub acute phase)
- c. Post-Disaster Phase; referred to as the reconstruction phase which consists of a recovery phase and a rehabilitation/reconstruction phase.

Preparedness is the activities and steps carried out to anticipate the possibility of a disaster in order to avoid casualties, property loss and changes in the way of life of the community. Preparedness efforts are carried out when a disaster is identified as about to occur. The activities carried out include activating disaster alert posts with all their supporting elements, alert/simulation/rehearsal/technical training for each sector of disaster management, SAR, social, health, infrastructure and public works. , inventory of emergency support resources, preparation of support and mobilization of resources/logistics, preparation of fast and integrated information and communication systems to support disaster tasks, preparation and installation of early warning system instruments, preparation of contingency plans and mobilization resources, both personnel and infrastructure or other equipment (Erita et al., 2019)

### **2. The Role of Nurses in Disasters**

The role of nurses at community health centers when a disaster occurs is to: care for minor patients, administer minor medications, refer patients. The functions and duties of nurses in disaster situations can be described according to the phases and conditions that apply when a disaster occurs as below (Tyas, 2016);

- a. Pre-disaster Phase

Nurses participate in education and training for health workers in dealing with disaster threats for each phase. Nurses are involved in various government

agencies, environmental organizations, the national Red Cross, and community institutions in providing counseling and simulations on preparations for facing disaster threats to the community. Nurses are involved in health promotion programs to increase community preparedness in facing disasters, namely self-help efforts (in the community), first aid training for families such as helping other family members, providing information on how to store and carry food supplies and safe use of water. , nurses can also provide several addresses and emergency telephone numbers such as fire services, hospitals and ambulances, provide information on alternative shelter places and disaster posts and provide information about equipment that can be brought such as necessary clothing, portable radios, flashlights and the battery, and so on.

b. Disaster Emergency Response Phase:

Nurses are required to be able to act quickly, do not promise. Nurses should not promise anything with certainty, with the intention of giving survivors high hopes. Concentrate fully on what is being done, coordinate and create leadership and for the long term, together with related parties can discuss and design a master plan of revitalizing, usually for the first 30 months.

c. Post-disaster Phase

Disasters certainly leave special marks on the physical, social and psychological conditions of victims. The psychological stress that occurs can continue to develop until post-traumatic stress disorder (PTSD) occurs, which is a syndrome with three main criteria. First, the symptoms of trauma can definitely be recognized. Second, the individual experiences symptoms of the trauma again through flashbacks, dreams, or events that triggered it. Third, the individual will show physical disorders. Additionally, individuals with PTSD may experience decreased concentration, feelings of guilt, and memory impairment. The health team together with the community and other related professions work together with cross-sector elements to handle post-emergency public health problems and accelerate the recovery phase towards a healthy and safe condition.

As the largest health workforce in health service facilities and acting as first responders and care givers in disaster emergency response, nursing staff are required to have a higher level of disaster preparedness than the general public. The competencies that nurses must have in order to maximize their preparedness abilities include First, Knowledge, namely attending disaster training, reading books and literature related to disaster preparedness and management, actively looking for and attending disaster preparedness and management seminars, having a contact list of health workers on site. work and support from the government during a disaster), the two skills are being ready to participate in disaster management, being involved in creating or developing emergency emergency guidelines, being able to act as a leader during a disaster, being aware of potential disaster risks, being able to respond to disaster emergencies, being able to implement the principles principles of triage during disasters, able to carry out emergency plans, evacuation procedures, able to differentiate between acute stress disorder and post-traumatic stress, able to carry out health assessments on disaster victims experiencing post-traumatic stress (PTSD).

The third is Disaster Management, namely knowing the limits of knowledge, skills and authority possessed, being able to identify the level of emergency of disaster victims by grouping patients with the same signs and symptoms, being able to handle symptoms and general reactions experienced by disaster victims who survive based on emotional conditions. , behavioral, cognitive and physical, able to carry out psychological interventions, behavioral therapy, cognitive strategies for patients who have experienced physical and emotional trauma, prepare emergency plans for themselves and their families during disasters, confident in their abilities as implementers of direct care and first responders during disasters , confident as a manager or coordinator in a disaster shelter, confident in caring for disaster victims independently without doctor supervision during a disaster, able to carry out logistics management and cross-program/sector cooperation in disaster management, able to implement emergency plans and procedures evacuation, able to differentiate between acute stress disorder and post-traumatic stress and able to carry out health assessments on disaster victims who experience post-traumatic stress (PTSD)

### **3. Preparedness Concept**

#### **a. Definition of Preparedness**

Preparedness is actions that enable governments, organizations, society, communities and individuals to be able to respond to a disaster situation quickly and effectively. Preparedness measures also include preparing disaster management, maintaining resources and training personnel (Widjanarko & Minnafiah, 2018)

#### **b. Preparedness Goals**

The aim of disaster preparedness is to reduce the risks (impacts) caused by disasters through effective, timely, adequate and efficient preventive measures for emergency response and assistance during disasters. Disaster preparedness actions can be direct or indirect (Widjanarko & Minnafiah, 2018)

### **4. Leadership Concept**

#### **a. Leadership Functions**

The success of members in carrying out their duties and responsibilities reflects the success of a leader with the leadership functions implemented. The leadership function is the embodiment of ideal conditions related to the work environment, which is enforced by certain leadership behaviors and is important for good organizational performance. Management is essentially a process of certain activities using other people through cooperation in achieving predetermined goals. Management will not work without the involvement of other people. This fact illustrates cooperation between people with all their abilities to achieve organizational goals. Leaders are the determining factor in the success or failure of an organization. Both in the business world and in the world of education, health, companies, social, political and government institutions. The quality of a leader will determine the success of an institution or organization. Because a successful leader will be able to manage his organization and can constructively influence other people so they can work together to achieve organizational goals (Sirait, 2024).

b. Leadership Behavior

The behavioral approach views that leadership can be learned from behavior patterns, and not from traits. The highlight of this theory is the behavior of leaders when they try to influence group members, both individually and collectively. Leadership behavior in this research is the specific actions of a leader in providing direction and coordinating the work of group members (Sirait, 2024).

**METHODOLOGY**

The research design used in this study was descriptive analytical with a cross sectional approach to analyze the relationship between nurse leadership and disaster preparedness in 5 Community Health Centers in Ende Regency. This research will be carried out at the Community Health Center from January to October 2023. The population in this study are all nurses at the Ende Regency Working Area Community Health Center. Sampling was taken using a non-probability sampling technique, namely purposive sampling. The instrument that will be used in this research is a questionnaire. Data on respondent characteristics and relationships between variables will be processed using SPSS software. Data analysis will be carried out in two stages, namely univariate analysis and bivariate analysis with multiple regression tests. The stages of data management are data collection, data cleaning, data processing, data analysis, data interpretation and data presentation.

**RESULTS**

**1. Distribution of Research Variables**

The distribution of research data can be seen in the table below which includes data on the frequency distribution of nurse leadership variables in disaster preparedness.

Table 1. Distribution of Respondents Based on Nurse Leadership in Disaster Preparedness in 5 Health Centers in Ende Regency City 2023

VARIABLES	F	%
<b>Leadership</b>		
Good	82	76.6
Enough	24	22.4
Less	1	.9
Total	107	100.0

Source: Primary data 2023

Based on table, it shows that the frequency distribution of the majority of leadership variables is categorized as good, with 82 respondents (76.6%)

## 2. Factor Analysis

### a. Kaiser-Meyer-Olkin (KMO) dan Barlett's Test

After entering the data (data entry) and coding into the Statistical Program for Social Science (SPSS) 25, the next step is to conduct the KMO (Kaiser-Meyer-Olkin) test.

Table 2. Results of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.547
Bartlett's Test of Sphericity	Approx. Chi-Square	141.958
	df	28
	Sig.	.000

From the results of the KMO test, a figure of 0.547 was obtained and a significance value of .000 was obtained. This means that the data can be said to be significant because the significance value of the data is  $<0.005$ , so the next step is to conduct an analysis of the nurse leadership variable.

### b. Rotated Component Matrix (RCM)

Tabel 3. Rotated Component Matrix (RCM)

	Component		
	1	2	3
Kepemimpinan	.833	-.084	.066

From the results of the RCM test, it shows that the nurse leadership variable is included in factor 1, namely (0.833). Thus, it can be said that the leadership variable can be called factor 1.

## 3. Multiple Regression Test

Regression analysis aims to measure the strength of the relationship between the determinant variables or predictors with the dependent variable.

Table 4. Multiple Regression Test Results

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.454	.522		.869	.387
	Kepemimpinan	-.020	.168	-.015	-.121	.904

From the results of the Reliability Centered Maintenance (RCM) test, it shows a significant leadership value (0.90). So it can be concluded that leadership has no relationship with nurses' disaster preparedness ( $>0.05$ ).

## DISCUSSION

Disaster and preparedness are things that cannot be separated and are interrelated. This can be seen from the definitions of each term which are related to each other. According to the Asian Disaster Reduction Center (2003), a disaster is a serious disruption to society that causes widespread losses that can be felt by the community, various materials and the environment (nature) where the impact exceeds human ability to overcome it with existing resources. (Ahmad Fauzi Budjang, 2021). Meanwhile, preparedness is a series of activities carried out to anticipate disasters through organization and appropriate and effective steps (Herdwiyanti, 2013).

The facts found in the field are that the government's attention to disaster management has not been fully maximized. Generally, the government or aid agencies only focus on emergency response efforts, while there is very little attention to the pre-disaster stage (Saparwati et al., 2020). Low community preparedness results in vulnerable conditions and is one of the factors in the occurrence of a disaster. Disasters can occur due to interactions between danger, vulnerability, capacity and risk. Risk is the result of the interaction of three other disaster factors. Systematically, risk is directly proportional to danger and vulnerability, and inversely proportional to capacity. High vulnerability will result in high risk. The high risk will be proportional to the extent of the impact of the disaster (Hakim Husen et al., 2020)

One of the requirements for success in disaster management is health workers. Limited quantity and quality of health workers is confusion, destruction, loss and disaster which is often the weak point in disaster management in Indonesia. The role of health workers is very strategic at all stages of disaster management, including the preparedness stage. Preparedness is defined as the preparation of a plan to act when a disaster occurs or is likely to occur (Sinaga, 2015). Apart from that, preparedness is also defined as an activity carried out to anticipate the possible impacts of a disaster by organizing in order to increase survival chances and minimize losses with effective and appropriate steps. (Darmawan et al., 2020).

In the preparedness phase, there are several important things that must be of serious concern to many parties, one of which is early detection of an impending disaster, an early warning process that must be carried out by parties who have authority so as to avoid unnecessary information, the existence of an effective information transmission chain. , decision making after early warnings, and appropriate dissemination of early warning information to the public. From many experiences in disaster mitigation, early reactions to early disaster warnings can save lives and property (Wardyaningrum, 2017)

The results of the research show that the majority of the frequency distribution of leadership variables is in the good category with 82 respondents (76.6%) with a significance value of 0.90 ( $>0.05$ ). So it can be concluded that the leadership variable has no relationship with nurses' disaster preparedness. Leadership is an effort to use a type of influence to motivate people to achieve certain goals. Leadership means involving other people, namely subordinates or employees who will be led. Leadership also involves sharing or delegating authority (Nuraida, 2011). One of the requirements for successful handling of disaster emergencies is leadership. The absence or weakness of leadership is confusion, destruction, loss, and disaster. The leadership in question should of course come from the authority owner (government), not individual nurses. The success of all elements of society in the event of a disaster really depends on the presence of leaders. Leadership in handling disaster emergencies must be able to quickly, accurately and courageously make decisions, be firm, and carry out a system of instructions rather than discussions (Sinaga, 2015).

According to research by Farida (2011), effective leadership will have a positive impact on nurse performance, and conversely, if leadership is ineffective it will have a negative impact on nurse performance. Based on the data obtained, there are still several nurses who have sufficient leadership, namely 24 (22.4%) and 1 is in the insufficient category (9%). It is important to identify nurses who have potential and are interested in leadership so that they can be included in leadership training (Sinaga, 2015). Nurses have a responsibility to achieve their role and competence not only in the preparedness or pre-disaster phase, but are responsible for all stages of a disaster, especially in the response or emergency response phase which includes warning, mobilization and evacuation, which is the first responsibility to be achieved. Then, assessing the health problems of victims and reporting data to relevant government agencies must be carried out in order to provide and stabilize the health conditions of disaster victims (Putra et al., 2015). Nurses' knowledge about leadership in disaster preparedness is very necessary so that the services provided are more optimal. According to Notoadmojo, knowledge is the result of knowing, this occurs after people sense an object. If the nurse's level of knowledge is lacking, it will create various forms of disaster risk in health care facilities. In this regard, the knowledge and leadership abilities of nurses in disaster preparedness are very important because nurses are the main spearhead in a service. (Radhi et al., 2019).

The research results in this article do not match many theories which assume that nurse leadership in disaster preparedness is very important because nurses have a key role in responding to emergency and disaster situations, both in hospitals, health facilities and in the community. In fact, nurses are often involved in disaster planning in hospitals and communities. They help design protocols, guidelines, and contingency plans to deal with various types of disasters, such as earthquakes, floods, fires, or pandemics. Nurses serve as coordinators between various health disciplines, emergency services, and government agencies to ensure an integrated disaster response. Nursing leadership also includes providing training to fellow health workers and the community on how to respond to disasters. This includes training related to

evacuation, medical triage, first aid, and post-disaster stress management. Nurses also play a role in increasing awareness of the importance of disaster preparedness through education and disaster simulations.

Nurse leadership can be seen when a disaster occurs, nurses who act as leaders must be able to make quick and effective decisions in emergency situations. They must organize patient care, manage medical resources, and ensure the safety and health of their own team. As leaders, nurses need to have good communication skills to provide clear instructions to the team and coordinate with related agencies. Transformational leadership among nurses is important in dealing with disasters, where a nurse leader inspires and motivates the team to work together under high pressure. Nurses must show empathy, effective communication, and a clear vision in dealing with disasters and post-disaster recovery. The leadership role of nurses can also be seen in advocacy for disaster preparedness, both with governments, non-governmental organizations and communities. Nurses can fight for better resource allocation, more comprehensive training, and policies that support disaster preparedness.

## **CONCLUSIONS AND RECOMMENDATIONS**

Nurse leadership (0.90) has no relationship with disaster preparedness (>0.05). Leadership in the preparedness phase is synonymous with the government having power over the utilization of disaster management preparedness resources. Identified nurse leadership in the emergency and post-disaster response phase for recovery such as planning and coordination, training and education, resource management and other leadership activities.

## **FURTHER STUDY**

There are several limitations in carrying out this research, namely the number of respondents does not cover the entire population, the research object only focuses on one variable, even though there are many other variables which are also considered to influence nurses' preparedness, the respondents' answers in the questionnaire do not show the actual situation due to differences in thinking, assumptions, and understanding. It is hoped that further research will be able to prepare better plans including rewards for respondents so that they get the expected results.

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## REFERENCES

- Ahmad Fauzi Budjang. (2021). Kajian Risiko Dan Mitigasi Bencana Pada Kawasan Wisata Pesisir Kabupaten Takalar (Studi Kasus: Kecamatan Mangarabombang) [Universitas Hasanuddin Makassar]. [https://r.search.yahoo.com/\\_ylt=AwrTZobm7X1iUZ4Ab0JXNyoA;\\_ylu=Y29sbwNncTEEcG9zAzEEednRpZAMEc2VjA3Ny/RV=2/RE=1652448871/RO=10/RU=http%3A%2F%2Frepository.unhas.ac.id%2Fid%2Feprint%2F4646%2F2%2FD52116008\\_skripsi%2520%25201-2.pdf/RK=2/RS=5v1.Tl2zFYD0m6OMJzUjhj](https://r.search.yahoo.com/_ylt=AwrTZobm7X1iUZ4Ab0JXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEednRpZAMEc2VjA3Ny/RV=2/RE=1652448871/RO=10/RU=http%3A%2F%2Frepository.unhas.ac.id%2Fid%2Feprint%2F4646%2F2%2FD52116008_skripsi%2520%25201-2.pdf/RK=2/RS=5v1.Tl2zFYD0m6OMJzUjhj)
- Anggun, T., Putera, R. E., & Liesmana, R. (2020). Pemberdayaan Masyarakat dalam Pengurangan Risiko Bencana Banjir di Kecamatan Padang Selatan. *JDKP Jurnal Desentralisasi Dan Kebijakan Publik*, 1(2), 123–137. <https://doi.org/10.30656/jdkp.v1i2.2415>
- Beccario, E. C., & Asia, S. (2015). Disasters in Asia and the Pacific : 2015 Year in Review (Issue October). United Nations ESCAP (Economic and Social Commission For Asia and The Pasific).
- Darmawan, I., Della, K., Avelia, P., & Haq, M. D. (2020). Edukasi Mitigasi Bencana Di Desa Cintamulya, Kecamatan Jatinangor, Kabupaten Sumedang, Provinsi Jawa Barat. *Kumawula: Jurnal Pengabdian Kepada Masyarakat*, 3(2), 129. <https://doi.org/10.24198/kumawula.v3i2.24745>
- Erita, E., Mahendra, D., & Batu, A. M. (2019). Manajemen Gawat Darurat dan Bencana. Universitas Kristen Indonesia.
- Hakim Husen, A., Kaelan, C., Nurdin, A., & J. Hadi, A. (2020). Faktor Determinan Kesiapsiagaan Perawat Terhadap Bencana Gunung Meletus (Gamalama) di Puskesmas Wilayah Kerja Dinas Kesehatan Kota Ternate. *Window of Health: Jurnal Kesehatan*, 3(2), 159–167. <https://doi.org/10.33368/woh.v0i0.313>
- Herdwiyanti, F. (2013). Perbedaan Kesiapsiagaan Menghadapi Bencana Ditinjau dari Tingkat Self-Efficacy pada Anak Usia Sekolah Dasar di Daerah Bencana. 5(1), 18. <http://repository.unair.ac.id/106133/>
- Hodge, A. J., Miller, E. L., & Skaggs, D. K. M. (2013). Nursing Self Perceptions of Emergency Preparedness at a Rural Hospital. *Journal Emergency Nursing*, 1–5. <https://doi.org/10.1016/j.jen.2015.07.012>
- Ihsan, F., Kosasih, C. E., & Emaliyawati, E. (2022). Kesiapsiagaan Perawat dalam Menghadapi Bencana : Literature Review. *Faletahan Health Journal*, 9(1), 66–79.
- Kemendes RI. (2020). Buku Pedoman RT RW Pencegahan COVID. In Kementerian Kesehatan Republik Indonesia (Vol. 53, Issue 9). [https://infeksiemerging.kemkes.go.id/download/BUKU\\_PEDOMAN\\_RT\\_RW\\_Pencegahan\\_COVID.pdf](https://infeksiemerging.kemkes.go.id/download/BUKU_PEDOMAN_RT_RW_Pencegahan_COVID.pdf)

- Martono, M., Nursalam, N., Satino, S., Efendi, F., & Bushy, A. (2018). Indonesian nurses' perception of disaster management preparedness. *Chinese Journal of Traumatology*. <https://doi.org/10.1016/j.cjtee.2018.09.002>
- Nuraida, K. (2011). Faktor-Faktor yang Berhubungan Dengan Kinerja Perawat Pelaksana di Ruang Rawat Inap Rumah Sakit Islam Faisal Makassar. 1-79.
- Putra, A., Juwita, R., Risna, Alfiandi, R., Arnita, Y., Iqbal, M., & Ervina. (2015). Peran Dan Kepemimpinan Perawat Dalam Manajemen Bencana Pada Fase Tanggap Darurat. *Idea Nursing Journal*, 6(1), 25-31.
- Radhi, S. F., Imran, & Mudatsir. (2019). Hubungan Tingkat Pengetahuan Dan Sikap Perawat Dengan Kesiapsiagaan Menghadapi Bencana Wabah Penyakit Malaria Di Kabupaten. December 2015. <https://www.researchgate.net/publication/331431829>
- Rina Susanti, Sri Adelila Sari, Sri Milfayetty, M. D. (2014). Hubungan Kebijakan, Sarana Dan Prasarana Dengan Kesiapsiagaan Komunitas Sekolah Siaga Bencana Banda Aceh. *Jurnal Ilmu Kebencanaan (JIKA) Pascasarjana Universitas Syiah Kuala*, 1(1), 42-49.
- Saparwati, M., Trimawati, & Wijayanti, F. (2020). Peningkatan Pengetahuan Kesiapsiagaan Bencana Dengan Video Animasi Pada Anak Usia Sekolah. *Pro Health Jurnal Ilmiah Kesehatan*, 2(1), 23-28. <http://jurnal.unw.ac.id:1254/index.php/PJ/article/download/22-28/pdf>
- Sembiring, E. E., & Nena Meo, M. L. (2020). Pengetahuan dan Sikap Berhubungan dengan Resiko Tertular Covid-19 pada Masyarakat Sulawesi Utara. *NERS Jurnal Keperawatan*, 16(2), 75. <https://doi.org/10.25077/njk.16.2.75-82.2020>
- Sinaga, S. N. (2015). Peran Petugas Kesehatan dalam Manajemen Penanganan Bencana Alam. *Jurnal Ilmiah Integritas*, 1(1), 1-7. <https://doi.org/10.24893/jkma.3.1.28-34.2008>
- Sirait, E. (2024). Peran Fungsi Kepemimpinan Sebagai Variabel Moderasi Antara Perilaku Kepemimpinan Terhadap Kinerja Organisasi. *Edunomika*, 08(02), 3-10.
- Turale, S. (2014). *Nursing and Health Policy Perspectives*. International Council of Nurses, December 2013, 2014.
- Tyas, M. D. C. (2016). *Keperawatan Kegawatdaruratan dan Manajemen Bencana*. BPPSDM Kemenkes RI.
- Usher, K., & Mayner, L. (2011). Disaster nursing: A descriptive survey of Australian undergraduate nursing curricula. *Australasian Emergency Nursing Journal*, 14(2), 75-80. <https://doi.org/10.1016/j.aenj.2011.02.005>

- Wardyaningrum, D. (2017). Perubahan Komunikasi Masyarakat Dalam Inovasi Mitigasi Bencana di Wilayah Rawan Bencana Gunung Merapi. *Jurnal ASPIKOM*, 2(3), 179. <https://doi.org/10.24329/aspikom.v2i3.69>
- Widjanarko, M., & Minnafiah, U. (2018). Pengaruh Pendidikan Bencana Pada Perilaku Kesiapsiagaan Siswa. *Jurnal Ecopsy*, 5(1), 1. <https://doi.org/10.20527/ecopsy.v5i1.4878>
- Yan, L., Turale, S., Stone, T. E., & Petrini, M. (2015). A grounded theory study of 'Turning into a strong nurse': earthquake experiences and perspectives on disaster nursing education. *Nurse Education Today*. <https://doi.org/10.1016/j.nedt.2015.05.020>