

# The Nurse Preparedness Experience in The Psychological Aspect of Earthquake in Mutiara Sukma Mental Hospital West Nusa Tenggara Province

1st Arif Munandar\*  
 University Muhammadiyah of Cirebon  
 Cirebon, Indonesia  
 arifm96553@gmail.com

2nd Fitri Arofiati  
 University Muhammadiyah of Yogyakarta  
 Yogyakarta, Indonesia  
 fitriarofiati@gmail.com

**Abstract-Background:** *This study provides an overview of the role of nurses in earthquake preparedness in the Mental Hospital of Mutiara Sukma, West Nusa Tenggara province and provides information regarding implementation strategies that can be carried out by health workers both in preparation and responding to earthquake disasters. Besides that, psychological aspects are very important that must be prepared by nurses in dealing with earthquake disasters, so as to prevent the psychological impact on both themselves and victims. To explore the experience of nurse preparedness in the management of psychological aspects after the earthquake disaster and explore the factors that influence nurse preparedness in the management of psychological aspects after the earthquake. This type of research is a qualitative research with a descriptive explorative approach. Data is collected by in-depth interview methods and observation techniques then analyzed based on emerging themes. The number of samples was 5 participants. The results of this study indicate that the preparedness of 5 nurses at the Sukma Pearl Mental Hospital in the province of West Nusa Tenggara was very satisfying. In this study, most of the roles of nurses have carried out their duties and obligations properly, due to the preparation of the institution in preparation for the earthquake disaster. All participants have been provided with training in handling emergencies. Mental hospitals as health care centers at the top level in efforts to reduce earthquake risk must be prepared with planning supported by the role of nurses in disaster management.*

**Keywords-***Preparedness, Psychological Aspects, Earthquake*

## INTRODUCTION

Indonesia is a country that is classified as vulnerable to earthquake disasters, this is related to Indonesia's geographical location which lies between two large oceans and is located in the area of tectonic plates that are prone to earthquakes [1]. West Nusa Tenggara and its surroundings are located on tectonic and volcanic lines, on the north side there is a very active Merapi volcanic, and on the south side (Indian Ocean) including the Java Trench which is the Indo-Australian-Eurasian plate subduction pathway [2]. The meeting of the Indo-Australian - Eurasian plate is the main cause of tectonic earthquakes in this region [3]. A total of 10 districts / cities in West Nusa Tenggara are included in the region at high risk of earthquakes [4].

Nurses are at the forefront of a hospital that has a large responsibility and role in the care of everyday emergency patients and during disasters [9]. The exact number of nurses involved in disaster management in the community is unknown [6]. Until now, the need for nurses to solve disasters in the community is the biggest need, which is 33% of all health workers involved [7]. This phenomenon makes researchers interested in learning more about the experience of nurse preparedness in the management of psychological aspects in dealing with earthquake disasters in the soul pearl hospital of West Nusa Tenggara province.

## METHOD

This research is an executive descriptive research, where researchers want to explain or explain the meaning or phenomenon of experience based on awareness that occurs in some individuals. This research was conducted on 25 January to 22 February 2019 [8]. The method of selecting participants was carried out on a non-probability sampling basis with a purposive sampling technique that is the appropriate sampling technique according to certain criteria [23].

The five participants who participated in this study were nurses who worked at Mutiara Sukma Mental Hospital, namely areas experiencing disasters, having previous experience in disaster management, and providing information needed by researchers [5]. Data collection in this study was carried out by in-depth interviews (in-depth interviews) using recorders and collection techniques. Interviews are conducted in a structured manner using interviews arranged by researchers based on theories that are relevant to the problem in the study [10]. Data is analyzed based on the main themes that emerge.

## RESULT

Based on the participatory participation data questionnaire in this study, the following research results were obtained: seen from the last participation education it was homogeneous because most of them were accessed by Nursing masters as many as 3 people, 2 people were

obtained. The level of education is strongly agreed upon by the knowledge one has, the higher the education allows the better knowledge. This means higher level education that allows participants to have better knowledge about management. Based on the results of interviews with participants regarding nurses 'knowledge in approving and classifying disasters, nurses' knowledge will occur in Sukma Mutiara Mental Hospital, nurse experience in previous disaster management, and nurse experience or involvement in research discussing earthquake disasters presented in table 2.

**Table 1. Characteristics of the Identity of Nurse Participants in Mutiara Sukma Mental Hospital, NTB Province in January 2019**

No	Participant code	Age (years)	Gender	length of working (years)	Last education
1	P1	47	L	27	Psychiatric master
2	P2	45	P	18	Master of nursing
3	P3	37	L	16	Master of nursing
4	P4	43	L	24	Ners
5	P5	27	L	4	Ners

**Table 2. Nurse Knowledge and Experience in Earthquake Management at Mutiara Sukma Mental Hospital, NTB Province**

P Code	Knowledge		Experience and Training	
	Defining and classifying disasters	Identifying emergency problems at Mutiara Sukma Mental Hospital	Discuss in previous disaster management	Emergency training
P1	Learn about the types of disasters	Earthquake	Get involved in response and recovery	PPGD
P1	Learn about the types of disasters	Earthquake	Engage in response	PPGD
P2	Learn about the types of disasters	Earthquake	Engage in response	PPGD
P3	Learn about the types of disasters	Earthquake	Engage in response	PPGD
P4	Learn about the types of disasters	Earthquake	Engage in response	PPGD
P5	Learn about the types of disasters	Earthquake	Engage in response	PPGD

All participants in this study were able to reflect on and clarify the disaster well, but not all participants understood the risk of disasters occurring in the hunting area [20]. The experience of participants in previous earthquake disaster management was also quite good, where participatory participants had been involved in emergency response efforts and were involved in disaster relief efforts [21].

Knowledge and experience in disaster management will previously affect a person's social and cognitive aspects in subsequent planning [22].

**DISCUSSION**

Based on the results of the research, researchers from the Sukma Pearl Mental Hospital have a disaster plan. This fact was made with the agreement given by K-1 participants, namely a procedure that is in accordance with the commitment and communication flow, making nurses in pearl mental hospitals involved in making disaster plans. K-2 participants added plans for disaster planning that must be carried out related to cross-sectoral, namely from the village level to the national level. In disaster planning, the parties involved are not only hospitals but also health centers, District and Provincial Health Offices and other health providers both private and government. For this reason, all organizations or work units must have their own disaster plans [11].

Risk assessment for the community related to disaster risk can be done by making a hazard analysis and analysis on the community [19]. Step by risk. If possible, it is very important to get multiple hazard maps or we can use it ourselves. The second step is to estimate each region [12].

Disaster prevention is a way that can be done to anticipate the possibility of a disaster [13]. The actions that can be taken in the conflict between the ones transferred in that are in the policy, foster awareness in the community and the system that has just been published. Most participants stated that they had participated in the coverage trial [18]. K-5 participants explained about prevention efforts carried out in preparation, nurses support education education to the people involved by making reports on disasters and providing financial assistance [14]. K-2 participants also gave support to cadres about emergency treatment for laymen. According to the participants of K-2 counseling about anticipating disasters it was felt that it was enough through television media. Health promotion program to improve community preparedness in facing challenges in part from community nurse planning [15]. All participants have participated in disaster management training, namely the Management of Emergency Patients. All participants agreed on disaster management training [16].

Despite having been exposed to previous disasters, all participants did not have family emergency planning or personal emergency planning. K-1 participants said that those who did not have special preparation, because the previous experience was enough. In the family the most important are families that will not be dispersed [17].

**CONCLUSION**

Nurses in sukma pearl psychiatric hospitals in West Nusa Tenggara Province have carried out their roles as nurses in disaster preparedness efforts because they have the knowledge and experience involved in disaster management. The roles that they can complete in the disaster plan include: 1) Making, Updating, and Implementing the Disaster Plan, 2) conducting risk

assessments in the community such as creating hazard maps and analysis, 3) conducting research on the impact of disasters such as raising community awareness and estimated systems earlier, 4) Following the Disaster Management Training Program, and 6) Having a personal preparedness plan, and family preparedness plan.

Research factors that influence the factors that influence nurse preparedness in the management of psychological aspects post earthquake disaster are factors in knowledge of disaster preparedness, attitudes towards disaster preparedness, policies and guidelines, plans for emergency situations, transportation systems, and resource mobilization.

### REFERENCES

- [1] Abdelghany Ibrahim, F.A., 2014. *Nurses Knowledge, Attitudes, Practices and Familiarity Regarding Disaster and Emergency Preparedness – Saudi Arabia*. *Am. J. Nurs. Sci.* 3, 18.
- [2] Adeney, Farsijana. (2007). *Women and Disasters*. Yogyakarta : Selendang Ungu Press
- [3] Afiyanti & Rachmawati. 2014. *Qualitative Research Methodology in Nursing Research*. Jakarta : Rajawali Pers.
- [4] Anies.2018. *Disaster Management, a solution for disaster prevention and handling*. Yogyakarta:GosyenPublishing
- [5] Ahayalimudin, N., Osman, N.N.S., 2016. *Disaster management: Emergency nursing and medical personnel's knowledge, attitude and practices of the East Coast region hospitals of Malaysia*. *Australas. Emerg. Nurs. J.* 19, 203–209. <https://doi.org/10.1016/j.aenj.2016.08.001>
- [6] Ahmadi, B., Rahimi Foroushani, A., Tanha, N., Bolban Abad, A.M., Asadi, H., 2016. *Study of Functional Vulnerability Status of Tehran Hospitals in Dealing With Natural Disasters*. *Electron. Physician* 8, 3198–3204.
- [7] Al-rousan, T.M., Rubenstein, L.M., Wallace, R.B., 2014. *Preparedness for Natural Disasters Among Older US Adults: A Nationwide Survey*. *Am. J. Public Health* 104, 506–511. <https://doi.org/10.2105/AJPH.2013.301559>
- [8] Alzahrani, F., Kyratsis, Y., 2017. *Emergency nurse disaster preparedness during mass gatherings: a cross-sectional survey of emergency nurses' perceptions in hospitals in Mecca, Saudi Arabia*. *BMJ Open* 7, e013563
- [9] Beaton, R, Brideges, E. Et al, 2015. *Ekologikal model of disaster management*. *AAOHN Journal* : 56 (11), 471 – 478.
- [10]Brooks, S.K., Dunn, R., Amlôt, R., Greenberg, N., Rubin, G.J., 2016. *Social and occupational factors associated with psychological distress and disorder among disaster responders : a systematic review*. *BMC Psychol.* 4. <https://doi.org/10.1186/s40359-016-0120-9>
- [11]Chii Tzeng, Hsin-Pei Feng , Wei-Tung Cheng, Chia-Huei Lin, Li-Chi Chiang , Lu Pai, Chun-Lan Lee. 2016. *Readiness of hospital nurses for disaster responses in Taiwan: A cross-sectional study*. *Nurse Education Today*. <https://dx.doi.org/10.1016/j.nedt.2016.02.025> 0260-6917/© 2016 Elsevier
- [12]Chopra, B.K., Venkatesh, M.D., 2015. *Dealing with disasters: Need for awareness and preparedness*. *Med. J. Armed Forces India* 71, 211.
- [13]Creswell, J.W. 2016. *Reaserch Design : Quantitative, Qualitative and Mixed Decisions 4th Edition*. Yogyakarta: Pustaka Pelajar
- [14]Damayanti, D. (2011). *Disaster Management Encourages Risk-Based Mitigation in Disasters Threatening Indonesia*. Jakarta: Penerbit Buku Kompas.
- [15]Ministry of Health of the Republic of Indonesia. 2005. *Primary health cares Guidelines for Disaster Management*. DepKes RI. Jakarta.
- [16]Gunawan, I. 2014. *Qualitative Research Methods: Theory & Pactics*. Jakarta : Bumi Aksara
- [17]Kusumasari,B. 2014.*Disaster Management and Capability of Local Government*. Yogyakarta : Gava Media
- [18]Hall, M.J., Ng, A., Ursano, R.J., Holloway, H., Fullerton, C., Casper, J., 2004. *Psychological impact of the animal-human bond in disaster preparedness and response*. *J. Psychiatr. Pract.* 10, 368–374.
- [19]Rabiei, A., Nakhae, N., Pourhosseini, S.S., 2014. *Shortcomings in dealing with psychological effects of natural disasters in iran*. *Public Health* 43,1132.
- [20]Saryono & Anggraeni. 2010. *Qualitative Research Methodology in the health sector*. Yogyakarta: Nuha Medika.
- [21]Seyedin, H., Abbasi Dolatabadi, Z., Rajabifard, F., 2015. *Emergency Nurses' Requirements for Disaster Preparedness*. *Trauma Mon.* 20. <https://doi.org/10.5812/traumamon.29033>
- [22]West Nusa Tenggara Provincial Regulation Number 9 of 2014 concerning Disaster Management
- [23]Pujiono. (2007). *Law of the Republic of Indonesia Number 24 of 2007 concerning Paragdimas Disaster Management*. Jakarta: BNPB.