

## Experience of Nurses' Preparedness in Managing Psychological and Physical Aspects of Earthquake Impacts at MutiaraSukma Mental Hospital, West Nusa Tenggara Province, Indonesia

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### Abstract

*Background: This study provides an overview of the role of nurses in earthquake preparedness in MutiaraSukma Mental Hospital, West Nusa Tenggara Province and provides information on implementation strategies that can be carried out by health workers both in preparation and response to earthquake disasters. Objective : Exploring the experience of nurse preparedness in managing psychological and physical aspects after the earthquake disaster and exploring the factors that affect nurse preparedness in managing psychological and physical aspects after the earthquake. Method: This type of research is a qualitative research with an exploratory descriptive approach. Data was collected using in-depth interviews and observation techniques and then analyzed based on emerging themes. The number of samples is 6 participants. Results : The results of this study indicate that the preparedness of 6 nurses in MutiaraSukma Mental Hospital, West Nusa Tenggara Province is very satisfactory. In this study, most of the roles of nurses have carried out their duties and obligations well, due to institutional preparation for earthquake disaster preparedness. Conclusion: All participants have been given training in handling emergencies.*

### Introduction

Indonesia is a country that is classified as vulnerable to earthquake disasters, this is related to Indonesia's geographical location which is located between two large oceans and is located in an earthquake-prone tectonic plate area [1]. West Nusa Tenggara and its surroundings are located on tectonic and volcanic pathways, on the north side there is a very active Merapi volcano, and on the south side (Indian Ocean) including the Java Trench which is a subduction route of the Indo-Australia-Eurasia plate. [2]. The meeting of the Indo-Australian - Eurasian plate is the main cause of tectonic earthquakes in this region [3]. A total of 10 regencies/cities in West Nusa Tenggara are included in earthquake-prone areas. Psychological preparation at the time disaster is an awareness or anticipation of events that may occur consisting of aspects awareness in anticipation likely to occur stress over disaster warnings might happen, the ability to recognize related thoughts with certain stress and feelings, confidence in doing management of psychological responses to stress and knowledge and responsibility answer (20). Psychological readiness for natural disasters include the level of awareness, high anticipation and preparedness to uncertainty and impact emotions from possible threats, responses someone's psychology when it happens threats, and the ability to set the situation. Readiness psychology consists of (1) awareness and individual anticipation of the possibility psychological response to situations disaster, stressful and uncertainty, including perceptions, value, and understanding of a person to risk and event communication dangerous (2) ability, trust self, and one's competence to manage psychological response to disaster situations, including emotion management skills (3) have knowledge, responsibility responsibility, and confidence, as well as competence to manage situations and the external physical state of a person on in disaster situations (27).

Nurses are the front line in a hospital that has a big responsibility and role in the care of daily emergency patients and in the event of a disaster [9]. The exact number of nurses involved in disaster management in the community is unknown [6]. Until now, the need for nurses to cope with 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 handling psychological and physical aspects. aspects of earthquake disaster management in MutiaraSukma Mental Hospital, West Nusa Tenggara Province.

## Method

This research is an executive descriptive study, where the researcher wants to explain or explain the meaning or phenomena of experience based on the awareness that occurs in several individuals. This research was conducted from September 20 to November 20, 2025 [8]. The method of selecting participants was non-probability sampling with purposive sampling technique, namely a sampling technique that complies with certain criteria [23]. The five participants who took part in this study were nurses who worked at MutiaraSukma Mental Hospital, namely areas that experienced disasters, had previous experience in disaster management, and provided information needed by researchers [5]. Data collection in this study was carried out by in-depth interviews using a recording device and collection techniques. Interviews were conducted in a structured manner using interviews compiled by researchers based on theories relevant to the problem in research [10]. The data were analyzed based on the main themes that emerged.

## Results and Discussion

Based on the questionnaire data on participatory participation in this study, the following research results were obtained: seen from the last participation education, it was homogeneous because most were accessed by the Master of Nursing as many as 4 people, 2 people obtained. The level of education is largely determined by the knowledge a person has, the higher the education the better the knowledge. This means higher level education which allows participants to have a better knowledge of management. Based on the results of interviews with participants regarding nurses' knowledge in approving and classifying disasters, nurses' knowledge of what will happen at the MutiaraSukma Mental Hospital, nurses' experiences in previous disaster management, and the experience or involvement of nurses in research discussing earthquake disasters. presented in table 1.

Table 1. Characteristics of Nurse Identity Participating in MutiaraSukma Mental Hospital West Nusa Tenggara Province in September 2025

No	Participant code	Age(years)	Gender	lengthof working(ye ars)	Last education
1	P1	47	Male	27	Psychiatric Master
2	P2	45	Female	18	Master of Nursing
3	P3	37	Male	16	Master of Nursing
4	P4	43	Male	24	Ners
5	P5	27	Male	4	Ners
6	P6	30	Male	20	Master of Nursing

Table 2. Knowledge and Experience of Nurses in Earthquake Handling at MutiaraSukma Mental Hospital West Nusa Tenggara Province

Partic ipant Code	Knowledge		ExperienceandTraining	
	Definingandclassifyin gdisasters	Identifyingemerg encyproblems atMu tiaraSukma MentalHospital	Discussinpreviousdisa sternagement	Emergencytrai ning
P1	Learn aboutthe types ofdisasters	Earthquake	Getinvolved responseand Recovery	In Emergency First Aid
P1	Learnaboutthetypesof Disasters	Earthquake	Engageresp onse	In Emergency First Aid

P2	Learn about the types of disasters	Earthquake	Engage response	In	Emergency First Aid
P3	Learn about the types of disasters	Earthquake	Engage response	In	Emergency First Aid
P4	Learn about the types of Disasters	Earthquake	Engage response	In	Emergency First Aid
P5	Learn about the types of Disasters	Earthquake	Engage response	In	Emergency First Aid
P6	Learn about the types of disasters	Earthquake	Engage response	In	Emergency First Aid

All participants in this study were able to reflect and clarify disasters well, but not all participants understood the risk of disasters occurring in hunting areas [20]. The experience of the previous earthquake disaster management participants was also quite good, where the participatory participants had been involved in emergency response efforts and were involved in disaster management efforts. Previous knowledge and experience in disaster management will affect a person's social and cognitive aspects in future planning.

Based on the research results, researchers from the MutiaraSukma Mental Hospital Hospital have a disaster management plan. This fact was made with the agreement given by the K-1 participants, namely procedures that are in accordance with the commitment and flow of communication, making nurses at the MutiaraSukmaMnetal Hospital involved in making disaster plans. K-2 participants added disaster planning plans that must be carried out related to cross sectors, namely from the village level to the national level. In disaster planning, the parties involved are not only hospitals but also puskesmas, 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 of the community [19]. Step by step. If possible, it is very important to get some hazard maps or we can use them 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]. Actions that can be taken in the conflict between those transferred in the policy, raise awareness in the community and the newly published system. Most of the participants stated that they had participated in the coverage trial [18]. Participants K-5 explained about the prevention efforts made in preparation, nurses supported educational education to the people involved by making disaster reports and providing financial assistance [14]. K-2 participants also provide support to cadres on handling emergencies for the general public. According to the participantsof the K-2 counseling on disaster anticipation, it was deemed sufficient through television media. Health promotion programs to improve community preparedness in the face of challenges are part of community nurse planning [15]. All participants have attended disaster management training, namely Emergency Patient Management. All participants agreed on the disaster management training [16]. Despite having been hit by a disaster before, all participants did not have family emergency planning or personal emergency planning. Participants K-1 said that they did not have special preparation, because previous experience was sufficient. In a family the most important thing is a family that will not be torn apart.

## Conclusion

Nurses at the MutiaraSukma Mental Hospital West Nusa Tenggara Province have carried out their roles as nurses in disaster preparedness efforts because they have the knowledge and experience of being involved in disaster management. The roles they can fulfill in a disaster plan include: 1) Creating, Updating and Implementing a Disaster Plan, 2) taking risks assessment in the community such as making maps and hazard analysis, 3) conducting research on disaster impacts such as increasing public awareness and forecasting systems, 4) Participating in a Disaster Management Training Program, and 6) Having a personal preparedness plan, and a family preparedness plan. Research factors that influence the factors that influence nurse preparedness in managing psychological and physical aspects after an earthquake are knowledge factors about disaster preparedness, attitudes towards disaster preparedness, policies and guidelines, emergency situation plans, transportation systems, and resource mobilization. Psychological preparation at the time disaster is part of necessary crisis management prepared and also need some special strategies to help nurse to have preparedness in dealing with earthquake disaster. The purpose of this preparation is the reduction in particular the impact psychologically and physically or even psychosocial that may arise.

## Recommendations

In this study, I recommend that nurses working in hospitals should have a complete understanding of standard operating procedures and technical implementation in handling disasters in the field, as well as paying attention to and preparing for physical and mental health.

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