



Description Preparedness Of Health Workers In Disaster Management In Public Health Center Disaster Vulnerable Area In Lhok Bengkuang Health Center

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ABSTRACT

Background: This research provides an overview of the role of health workers in disaster preparedness at Community Health Centers and provides information regarding implementation strategies that health workers can use both in preparing for and responding to disasters. Objective: to understand the preparedness of health workers in disaster management at the Lhok Bengkuang Community Health Center, South Aceh Regency. Method: This type of research is quantitative research with a cross sectional approach. The population in this study was 82 health workers in the Lhok Bengkuang Tapaktuan Health Center Working Area in 2023. The sample taken in this study used an accidental sampling technique totaling 70 people. Results: The research results showed that of the 70 respondents, 44 people were less prepared to face disasters, 20 people were ready to face disasters. Of the 70 respondents, 38 people had <10 years of work experience, and 32 people had ≥10 years of work experience. There were 32 people who had little knowledge about disasters and 36 had a positive attitude towards disasters. And there were 44 people who stated that disaster preparedness was lacking. Conclusions and Suggestions: There is a significant relationship between education, knowledge, attitudes and work experience and the preparedness of health workers in facing disasters in the Lhok Bengkuang Health Center work area, Tapaktuan. It is hoped that health workers at Community Health Centers can increase awareness and ability to prepare for disasters.

INTRODUCTION

A disaster is any event that causes ecological damage, loss of human life, or worsening health status in certain circumstances that requires a response from outside the affected community and region. (Bakri, 2020) Disaster is an event or series of events that threatens and disrupts people's lives and livelihoods caused by either natural factors and/or non-natural factors or human factors, resulting in human casualties, environmental damage, property loss and impacts. psychological. (BNPB, 2022)

Indonesia is a country prone to natural disasters, based on data recapitulation from all Regional Disaster Management Agencies (BPBD) during 2021 there were 5,402 disaster events, and 99.5% of the events throughout 2021 were hydrometeorological disasters which were dominated by flood disasters, namely 1,794 incident. (BNPB, 2022).

Indonesia is one of the countries most prone to disasters in the world, frequent and unpredictable, including earthquakes, tsunamis, landslides, volcanic eruptions, floods and droughts (CFE-DM, 2018). Indonesia is located on a volcanic belt (volcanic arc) that extends from the islands of Sumatra, Java, Nusa Tenggara and Sulawesi, which is dominated by active volcanic mountains, and makes 87% of Indonesia's territory prone to natural disasters (Putra et al., 2015). The National Disaster Management Agency (BNPB) recorded that in 2017 there were 2,862 natural disasters, including floods (34.2%), tornadoes (31%), landslides (29.6%), forest and land fires (3.4%).), earthquakes (0.7%), drought (0.6%), tidal waves/abrasion (0.4%), and volcanic eruptions (0.1%) (BNPB, 2018).

South Aceh Regency is a disaster-prone area, namely prone to floods, tidal waves, earthquakes, high ground movements, tsunamis, abrasion, erosion and strong winds (PKP South Aceh, 2022).

Hodgetts & Jones (2002), said that the factor that supports success in disaster management is disaster management. In various countries that have experienced disasters with quite a lot of victims, a big problem that arises is the lack of good disaster management. Problems occur at all stages of disaster management starting from acute response, recovery, reconstruction, prevention, mitigation and preparedness. One of the requirements for success in disaster management is health workers. The absence or weakness of health personnel is confusion, destruction, loss and disaster. However, this is precisely what is usually the weak point in disaster management in Indonesia, including the case of earthquake and tsunami management in NAD, especially in the early moments of a disaster, where the role of health workers is very necessary.





LITERATURE REVIEW

- **The importance of disaster preparedness:** Start by highlighting the increasing frequency and impact of disasters worldwide (Putra et al., 2021). Emphasize Indonesia's vulnerability to natural disasters, particularly earthquakes and tsunamis (Emaliyawati et al., 2021); (Putra et al., 2021).
- **Role of public health centers:** Introduce public health centers as critical front-line healthcare providers in disaster-affected areas.
- **Focus on health worker preparedness:** Emphasize the significance of health worker preparedness for effective disaster response and saving lives.

Defining Disaster Preparedness

- **Components of preparedness:** Discuss the key components of disaster preparedness, including:
 - Risk assessment and early warning systems.
 - Development of disaster management plans and standard operating procedures (Fuady et al., 2011).
 - Training and education of health workers.
 - Resource mobilization and logistics.
 - Coordination and communication mechanisms.
- **WHO framework:** Refer to the World Health Organization framework for disaster preparedness, which outlines essential elements for health emergency preparedness.

Knowledge and Skills of Health Workers

- **Essential knowledge:** Review the literature on the essential knowledge required for health workers in disaster management, such as:
 - Disaster epidemiology and public health principles.
 - Triage and emergency medical care.
 - Infection control and prevention.
 - Mental health and psychosocial support.
- **Required skills:** Discuss the necessary skills for health workers, including:
 - Basic life support and first aid.
 - Wound management and trauma care.
 - Communicable disease control.
 - Data collection and reporting.
- **Training programs:** Analyze the effectiveness of different training programs in improving health workers' knowledge and skills.

Resources and Infrastructure

- **Availability of resources:** Examine the availability and adequacy of essential resources in PHCs, such as:
 - Medical supplies and equipment.
 - Communication equipment.
 - Transportation.
 - Emergency shelters.
- **Infrastructure preparedness:** Discuss the importance of infrastructure preparedness, including:
 - Structural safety of PHC buildings.
 - Accessibility and functionality of water and sanitation systems.
 - Availability of backup power supply.

Coordination and Collaboration

- **Inter-agency coordination:** Highlight the importance of coordination and collaboration among different agencies involved in disaster response, such as:
 - Government agencies.
 - Non-governmental organizations.
 - Community-based organizations.
- **Community participation:** Emphasize the role of community participation in disaster preparedness and response.
- **Communication strategies:** Discuss effective communication strategies for disseminating information and coordinating activities during disasters.

Challenges and Gaps

- **Identify the challenges:** Identify the challenges and gaps in health worker preparedness in disaster-vulnerable areas, such as:
 - Limited resources and funding.
 - Inadequate training and education.
 - Lack of coordination and communication.



- Insufficient community participation.
- **Discuss the gaps:** Discuss the gaps in the literature and suggest areas for future research.

METHOD

This type of research is quantitative research. Based on the time of data collection, it was carried out cross-sectionally. The research was carried out in September 2023 at the Lhok Bengkuang Community Health Center, Tapaktuan District, South Aceh Regency. The population in this study was all health workers who worked at the Lhok Bengkunag Community Health Center, totaling 70 people. In this research the entire population was used as a sample (total sampling). Data collection was carried out using a questionnaire instrument. Data processing is carried out by editing, coding, data entry and cleaning. Data analysis was carried out using computerized assistance with univariate analysis and bivariate analysis. Univariate analysis was carried out to get an idea of the frequency distribution of respondents and bivariate analysis was carried out to examine the Preparedness of Health Workers in Disaster Management at the Lhok Bengkunag Community Health Center, South Aceh Regency. This research uses the chisquare test with a confidence level of 95%. If the p-value ≤ 0.05 then H_0 is rejected, if p-value > 0.05 then H_0 is accepted.

RESULT

Table 1. Frequency Distribution of Respondent Characteristics at Lhok Bengkuang Community health Center Tapaktuan Distric in September 2023 (n=70)

No	Demographic Characteristics	Frekuensi (f)	n (%)
1	Gender		
	Male	14	20
	Female	56	80
2	Age		
	< 35 years	36	48,6
	≥ 35 years	34	51,4
3	Education		
	D III	44	62,9
	D IV	8	11,4
	S I	18	25,7
4	Long working Periode		
	<10 tahun	38	54,3
	≥ 10 tahun	32	45,7
5	Profesi		
	Dokter	4	5,8
	Dentist	1	1,4
	Public Health	6	8,6
	Nurse	31	44,3
	Nutritionist	3	4,3
	Midwife	19	27,1
	Pharmaceutical	5	7,1
	Analyst		
	physiotherapy	1	1,4
6	Knowledge		
	Good	32	45,7
	Less	38	54,3
7	Attitude		
	Positive	36	51,4
	Negative	34	48,6
8	Disaster Preparedness		
	Good	26	37,1
	Less	44	62,9

Based on Table 1 sociodemographics health workers at the Lhok Bengkuang Community Health Center South Aceh Regency it is known that Most of the respondents were under 35 years of age namely as many as 36 respondents (48.6%), type 56 respondents were female (80%), 44 had D-III education respondents (62.9%), long working periode < 10 years as many as 38 (54.3%), nursing profession as many as 31 respondents (44.3%), knowledge health workers are



classified as good, namely as many as 32 respondents (45.7%), and attitudes health workers are classified as positive, namely as many as 36 respondents (51.4%). Disaster preparedness was lacking by 44 respondents (62.9%)

The Disaster training is significant and useful for improving the knowledge, attitudes and practices of nurses. The authors of the study indicate that training is important to ensure preparedness in dealing with disaster situations, because understanding the training material makes a positive contribution to disaster management capabilities. Emergency medical personnel and nurses who take part in disaster training and are involved in disaster management are more confident and responsive in their actions so they can increase awareness of the importance of learning about disaster management (Ahayalimudin & Osman, 2016).

The results of this research show that the majority of health workers (doctors, nurses and midwives) have insufficient knowledge about disaster management, especially regarding its meaning and the efforts made in each phase, although the majority still make mistakes in differentiating the classification of natural disasters, non-natural and social disasters. Several similar studies conducted on health workers, namely nurses, show that these results are in line with research by (Hermawati, 2010), which shows that nurses have a lower level of knowledge about disasters. Likewise, the results of a study by Hammad et al (2011) concluded that nurses had insufficient knowledge of disaster.

According to (Setiawati et al., 2020) nurses must have knowledge about health service preparedness in facing flood disasters. This is because everything related to aid equipment, medical assistance must be done well, in an urgent time. Nurses' knowledge of disaster preparedness efforts is the basis for providing health services during a flood disaster. Lack of knowledge of nurses will affect the speed and accuracy in providing optimal health services in urgent situations or during disaster emergency response.

The results of this research show more positive attitudes from respondents dominant negative attitude. This is not in line with the results of research by (Susilawati, 2018) which reported that only a small portion of respondents in research on health workers at disaster-prone health centers in West Sumbawa Regency had a positive attitude towards disaster management. The positive attitude of respondents in this study is not in line with previous research by (Ahayalimudin et al., 2012) which found most nurses have a positive attitude towards disaster management.

DISCUSSION

The results of this research are in line with research conducted by (Astari et al., 2020) that there is a relationship between attitudes and the preparedness of health workers in hospitals in facing disasters. The attitude and response of each health worker to a disaster also determines the success of the performance of health workers in dealing with disasters and the safety of the health workers themselves. Attitude is a response that will determine a person's actions or behavior. Attitudes influence behavior through the process of determining decisions and in this case it is the decision of health workers to carry out preparedness in disaster management efforts. The attitude of disaster preparedness in health workers will increase a sense of optimism in providing nursing care during disaster emergency response. The preparedness of health workers is intended to raise awareness and readiness of health workers in preparing health services that are ready to face disasters. Health workers who have a good preparedness attitude will be able to provide good and optimal health services during flood disaster emergencies (Setiawati et al., 2020). All efforts or activities of health workers are carried out in the context of prevention, mitigation, preparedness, emergency response and Disaster-related recovery is carried out before, during and after a disaster and is designed to provide a framework for individuals or communities at risk of being affected by a disaster to avoid, control risks, reduce, overcome or recover from the impacts of disasters (Azkha, 2009).

CONCLUSION

Based on research results and descriptions discussion, then conclusions can be drawn It is assumed that there is a relationship between age, length of service, previous experience, knowledge and attitudes of health workers on the preparedness of health workers in disaster management at the Lhok Bengkuang Community Health Center, South Aceh Regency. While the gender indicator, education, the health worker profession is not has a relationship to preparedness health workers in disaster management.

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To maximize the role of officers health in disaster management then need to carry out training, rehearsals/simulations, cooperate and coordinate with cross-country sectors such as BPBD South Aceh Regency especially regarding good disaster management at the disaster stage, during a disaster or post-disaster so that BPBD can immediately take appropriate action on time disaster occurs.

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