Cianjur Earthquake Disaster Emergency Management: Muhammadiyah Disaster Management Center Sitrep Study

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Abstract. Indonesia is a country prone to disasters. Entering the end of 2022, in the Cianjur area, West Java, on November 21, 2022, 17,864 houses were recorded as heavily damaged, 321 people died, 11 people were missing, 108 were injured and 73,874 people were displaced. So the emergency response period is set at 1 month. Muhammadiyah Disaster Management Center (MDMC) has been carrying out an emergency response since the disaster occurred and providing assistance for the next 3 months. The purpose of this study was to find out the emergency response handlers carried out by Muhammadiyah. The methodology in this research is to analyze the sitrep report documents made by MDMC. The condition of the people in Cianjur are currently displaced in scattered locations because they are still prone to landslides. So, the urgent need is temporary housing. Muhammadiyah's response in the emergency response was carrying out treatment, forming a public kitchen, psychosocial, logistical assistance, and deploying a Muhammadiyah SAR team. So that Muhammadiyah has provided assistance to 18,185 beneficiary souls. Implementation in this study states that Sitrep is needed in implementing, evaluating and also future improvements in disaster management.

Keywords: Cianjur, Management, Disaster, Situation Report, MDMC.

1 Introduction

Indonesia is an archipelagic country located on the equator and known for its disaster-prone areas due to exposure to nature and a dangerous climate [1]. Disaster analysis in Indonesia shows areas prone to natural disasters such as earthquakes, landslides, floods and volcanic eruptions. The existence of interactions between these plates places the Indonesian region as an area that is very prone to earthquakes.

In recent years, various major earthquake activities have been recorded in Indonesia, namely the 2004 Aceh Earthquake accompanied by a tsunami (Mw = 9.2), the 2005 Nias Earthquake (Mw = 8.7), the 2006 Jogja Earthquake (Mw = 6.3), the Tasik Earthquake in 2009 (Mw = 7.4) and finally the Padang Earthquake in 2009 (Mw = 7.6). The

Z. B. Pambuko et al. (eds.), *Proceedings of the 4th Borobudur International Symposium on Humanities and Social Science 2022 (BIS-HSS 2022)*, Advances in Social Science, Education and Humanities Research 778,
https://doi.org/10.2991/978-2-38476-118-0_163

earthquake has caused thousands of fatalities, collapse and damage to thousands of infrastructures and buildings, as well as trillions of rupiah in funds for rehabilitation and reconstruction. Entering the end of 2022, the Cianjur area, West Java, experienced an earthquake (Fig. 1). On November 21, 2022, 17,864 houses were recorded as heavily damaged, 321 people died, 11 people were missing, 108 were injured and 73,874 people were displaced.

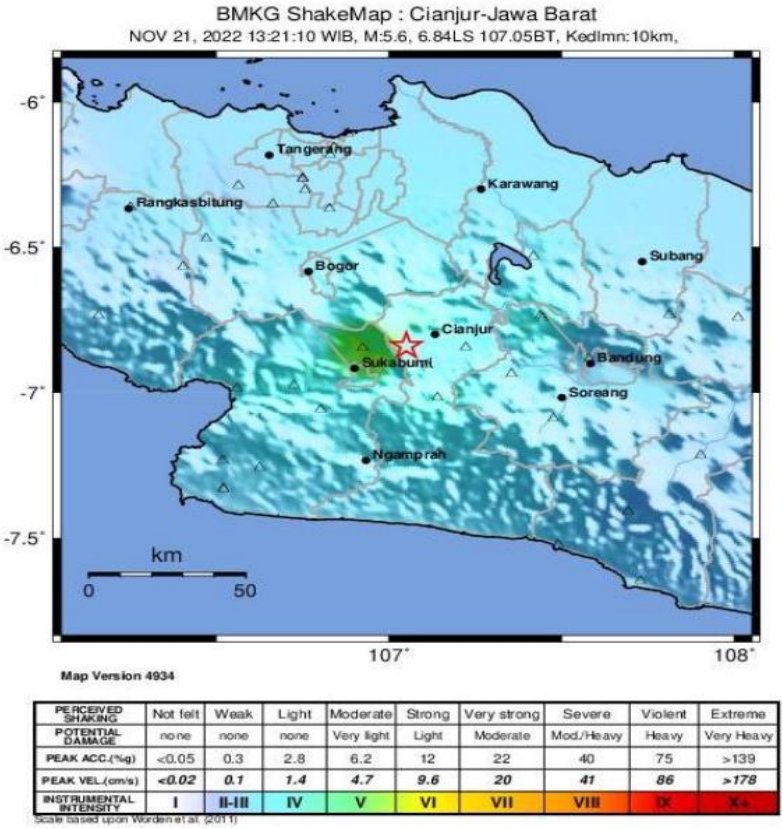

Fig. 1. Shake map of the Cianjur earthquake (Source: BMKG)

History of earthquakes in Cianjur There was an earthquake in 2009. The earthquake had an impact, Cianjur Regency was hit by an earthquake which caused 28 people died, 42 people were missing and 21 people were injured, and 10,047 residents were displaced. Lack of information, especially spatial data regarding the condition of areas potentially or affected by earthquakes can exacerbate losses that will be incurred in the future and will take longer for the handling stages.

The impact of the 2022 Cianjur earthquake with many damaged houses ranging from mild to severe categories has created a separate problem in handling the emergency response. Coupled with the health condition of many people who were injured and had to get treatment. Muhammadiyah community organizations carry out various handling

assistance, especially through the Muhammadiyah Disaster Management Center (MDMC) by providing disaster management assistance in the emergency response and recovery phases. MDMC determines an emergency response period that starts when the disaster occurs and is programmed to provide assistance for the next 3 months.

The emergency response period in disaster management, especially in the first 1 month, requires speed in handling. The National Disaster Management Agency (BNPB) and the Regional Disaster Management Agency (BPBD) have carried out handling at the disaster site. However, disasters are not the government's only business and need assistance from non-governmental assistance. Various health problems, shelter and food needs are urgently needed. In an effort to handle the Cianjur emergency response, it is necessary to handle it in a professional, measurable and well-reported manner. MDMC conducts an evaluation through a daily situation report (Sitrep). With this monitoring and evaluation, it is hoped that it will make it easier to deal with situations in the field appropriately during the emergency response period. Therefore, researchers are interested in conducting a study on MDMC's sitrep in handling the Cianjur Earthquake in the first month. With the analysis, we can monitor emergency needs in the field.

2 Method

The purpose of this research is to find out the emergency responders carried out by Muhammadiyah and the urgent needs in the first month of the emergency response. The methodology in this study was to analyze the Sitrep report documents made by MDMC during the emergency response. Samples were taken by total sampling of Cianjur earthquake management sitrep documents compiled by MDMC during the first month.

3 Result and Discussion

Disaster is an event or series of events that results in victims of human suffering and can disrupt the order of life and people's livelihoods. Disasters are basically unavoidable, but humans are only able to prevent and prepare themselves before the disaster suddenly comes. The emergency response to the Cianjur earthquake disaster has passed its first month of handling. MDMC established a Coordinating Post at the Muhammadiyah Cianjur Creative Islamic College and established 4 service posts. The results of research on handling the Cianjur earthquake emergency response conducted by MDMC are:

3.1 Human Resources

The handling of the emergency response to the Cianjur earthquake carried out by MDMC varied greatly in the specifications of the human resources required. Several skills are needed such as the health team, logistics, kitchen team, SAR and others (Fig. 2).

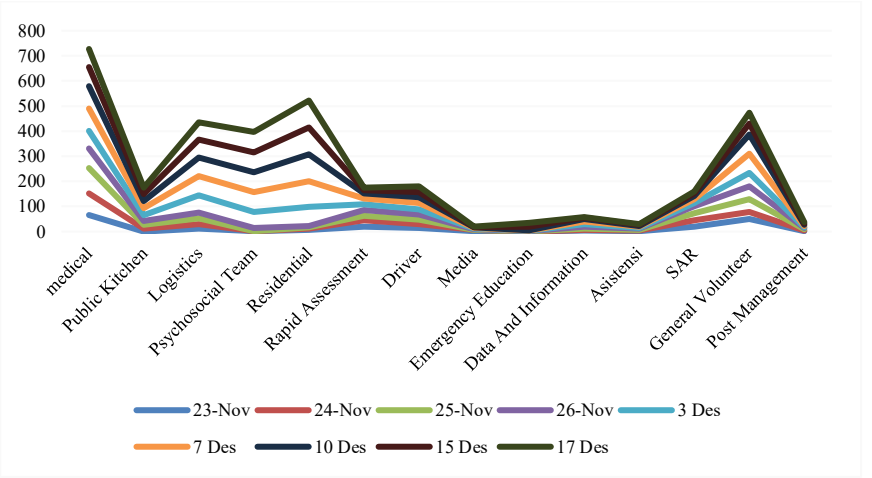

Fig. 2. Human Resources [2]

The disaster paradigm in Indonesia is starting to change, from just handling when a disaster occurs to being more preventive or preventive. According to Kartasasmita, planning here provides an opportunity to develop individual initiatives and develop the full capacity and potential of the community, where community participation and involvement in this matter must continue to be facilitated and empowered who have awareness and need for the importance of disaster management [3]. Therefore, when a disaster occurs, human resources are prepared in emergency response efforts

Based on the Fig. 2, the most needs during the emergency response phase are the needs for medical, logistical, psychosocial and SAR personnel. This shows that the impact of the earthquake on the health sector is very high. Therefore, tackling a disaster cannot be done suddenly but requires preparations that must be made long before the disaster occurs through a process called disaster management. One of the preparations that can be made before a disaster comes is to prepare human resources well, one of which is by developing the human resources they have [4].

3.2 Emergency Response Service

Services in carrying out the emergency response phase carried out by MDMC include health services, food logistics assistance, non-food logistical assistance, shelter, psychosocial, clean water supply and education. Within one month the following Fig. 3 can be obtained.

Most of Indonesia's population lives in areas that are prone to natural disasters, including earthquakes. Earthquake disaster followed by evacuation has the potential to cause health problems; however, health services during disasters often face obstacles, among others due to damaged or inadequate health facilities. From the results of an analysis of emergency response services for one month of handling, it was found that

the highest need and provided was food logistics for 15,691 people. Followed by non-food logistics with 5,080 recipients and health services with 3,090 recipients. One of the impacts of the disaster on the declining quality of life of the population can be seen from the various public health problems that occur. Disasters followed by displacement have the potential to cause health problems which were actually initiated by problems in other fields/sectors [5]. Situations that will occur in some communities due to the consequences of disasters that occur wherever they occur such as: Death and injury, loss of supplies (food, fuel, goods), loss of communication, loss of power, loss of services water (fresh water, rainwater, waste water), loss of social services (financial, nursing, medical), loss of business, loss of social structure and function.

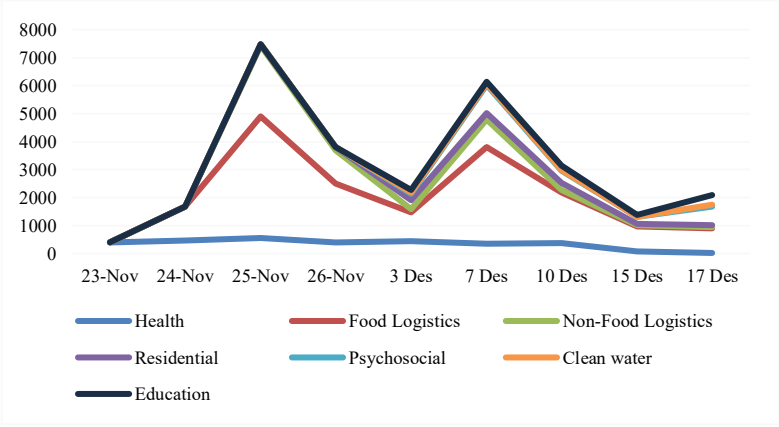

Fig. 3. Beneficiary Data [2]

3.3 Diseases suffered by the victim

Disasters will have an impact on the health of the victims. From the analysis of this study shows that the majority of victims with bruises and fractures. MDMC carried out response activities on the first day with the following Fig. 4.

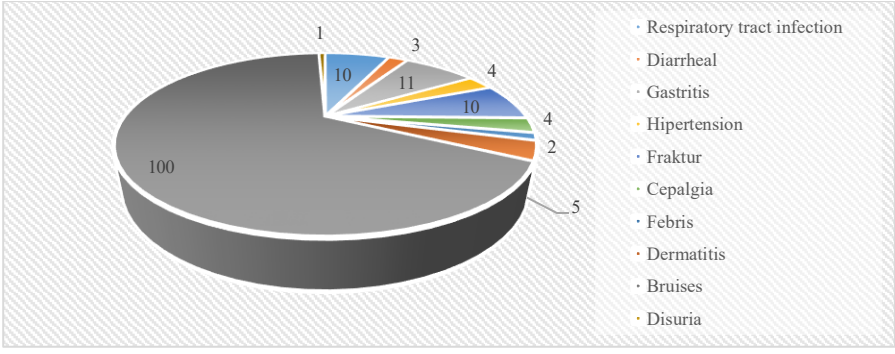

Fig. 4. Disease data [2]

An earthquake is a vibration that occurs on the surface of the earth due to the sudden release of energy from within which creates seismic waves. Earthquakes are usually caused by the movement of the Earth's crust (Earth's plates). The frequency of a region, refers to the type and size of earthquakes experienced over a period of time. Earthquakes will have an impact on the health sector. From the data above, the illnesses suffered by the majority of victims were bruises and fractures. Followed by gastritis which occurred after the disaster. Abdullah (2017) states that disasters such as earthquakes cause damage to people's homes, offices, markets, docks, roads, fatalities and injuries. Therefore, in carrying out earthquake disaster management, it is necessary to prepare temporary shelters and handling them in the health sector.

3.4 Urgent Needs

The urgent need that is needed by victims of the Cianjur disaster during the emergency response period is the availability of temporary housing. Home is one of the important basic needs for affected communities. So MDMc carried out a temporary shelter building program to meet the housing needs. In addition to this, the need for health services is very necessary. Muhammadiyah's response in disaster emergency response in the health sector was to carry out treatment in 10 places in Cianjur with the help of Muhammadiyah and Aisyiyah Hospitals.

The needs that need to be prepared are logistical needs in the form of food needs. MDMc established public kitchens to meet the food needs of refugees. Besides that, in terms of emergency response and psychosocial rehabilitation, it is urgently needed to prevent trauma, especially in children. The community's ability to “bounce back” from severe stress, which includes four adaptive capacities in the form of Economic Development, Social Capital, Information and Communication [6], makes this a reference for making disaster risk reduction in the future, as well as the ability system in reorganizing and recovering from changes and disturbances without changing to another stage in other words, a system that is “safe to fail” [7]. Disaster risk reduction in the form of realignment of emergency management, a state of reaction to proactive planning, with a focus on resilience, mitigation, preparedness and recovery programs [8] can be developed after looking at the impact and loss of natural disaster events.

4 Conclusion

Based on the results of the research, it shows that the emergency response period is something that is really needed in providing assistance to affected victims. During the first month of the Cianjur earthquake, people really needed housing, health services and food logistics. Program planning by MDMC through the sitrep report illustrates that sitrep is responsible for program planning, implementation and monitoring of emergency response program activities and can evaluate a program of disaster management activities.

Acknowledgement. The author would like to thank MDMC for giving the opportunity to researchers to analyze the data for the sitrep report on the handling of the Cianjur earthquake, West Java. We do not forget to thank the local government and Muhammadiyah leadership in Cianjur district for the establishment of the MDMC coordination post.

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