

Research Article

Perceptions and Experiences of Survivors of Mount Semeru Eruption in Getting Health Services during Covid-19 Pandemic

Persepsi dan Pengalaman Penyintas Erupsi Gunung Semeru dalam Mendapatkan Pelayanan Kesehatan saat Pandemi Covid-19

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ABSTRACT

Disaster events pose challenges for health workers in overcoming health problems in refugee camps. The eruption or hot clouds of Mount Semeru that occurred during the Covid-19 pandemic made sick survivors have to continue to receive health services, even though they were in refugee camps. Survivors' experiences in receiving health services and their illnesses varied widely. Perceptions of survivors in obtaining health services showed that most of them were well served and experienced a good referral system to higher-level hospitals. Home care was carried out by health workers to survivors after returning from refugees.

Keywords: Covid-19 pandemic, health service, perception, survivor, Semeru eruption

ABSTRAK

Kejadian bencana memberikan tantangan bagi tenaga kesehatan dalam mengatasi masalah kesehatan di tempat pengungsian. Kejadian erupsi atau awan panas guguran gunung semeru terjadi saat pandemi Covid-19 membuat warga penyintas erupsi yang sakit harus tetap menerima pelayanan kesehatan, meskipun berada di pengungsian. Pengalaman penyintas dalam menerima pelayanan kesehatan dan penyakitnya sangat bervariasi. Persepsi penyintas dalam memperoleh layanan kesehatan menunjukkan sebagian besar dilayani dengan baik, demikian juga sistem rujukan ke rumah sakit yang lebih tinggi dialami dengan baik. *Home care* dilakukan oleh tenaga kesehatan kepada penyintas sesudah kepulangan dari pengungsian.

Kata Kunci: Erupsi Semeru, pandemi Covid-19, pelayanan kesehatan, penyintas, persepsi

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INTRODUCTION

The eruption of Mount Semeru on December 4, 2021, had an impact on the community and the surrounding environment. The fall of the hot clouds of Mount Semeru which led to Besuk Kobokan, Supiturang Village, Pronojiwo District, Lumajang Regency, East Java, Indonesia made several people have to live in refuges or evacuation areas (1). The eruption occurred along with the ongoing Covid-19 pandemic, with 1,458 confirmed cases of Covid-19 in Indonesia until the first week of December 2021, 69 deaths in the first week, and an increase in the death rate of almost 17% compared to the previous week (2).

Health service in refuge areas is a challenge for health workers, given the limitations of existing facilities and infrastructure, refuge locations that are sometimes difficult to reach by 4-wheeled vehicles, and the reduced number of health workers from the local area who may also be people affected by the eruption. The road transportation from the Pronojiwo sub-district to the city of Lumajang was cut off due to the collapse of the Gladak Perak bridge, causing referral to be directed to health facilities in the nearest sub-district, in the area of Malang Regency (3).

Health workers in Public Health Centre (*Puskesmas*) during the Covid-19 pandemic generally provide a lot of services such as screening, testing, and referral of patients with moderate and severe Covid-19 symptoms to Covid-19 referral hospitals, as well as preparing quarantine/isolation for asymptomatic patients and patients with mild symptoms of Covid-19. Thus, the eruption and pandemic were a double burden for health workers in the affected area. How about health services during the pandemic in the refugee camps received by people who were sick? This study aims to explore the experiences and perceptions of affected people who are survivors of the Mount Semeru eruption, who were sick at that time, in receiving health services during the eruption and Covid-19 pandemic in Pronojiwo sub-district, Lumajang Regency.

METHOD

This study employed a qualitative method with a descriptive phenomenological approach. The number of participants was ten, who were selected by purposive sampling. Participants in this study were older adult consisting of the father and mother. The instrument in this research was the researcher himself. At the time of the interview, the researcher used an interview guide that was equipped with field notes. The tools that the researcher used were mp4 as a recording device and writing instrument. The method of analysis in this study was the Colaizzi method. This study began with the signing of informed consent stating that the participants were willing to be involved in the study.

RESULTS

The results of the study on respondents who are survivors of the Semeru eruption showed various experiences they have, with different backgrounds of diseases or complaints. Most of the services were obtained by respondents while in refugee camps.

The variation of duration in refuges is between two days (two nights) to ten days. In the case of:

Respondent #7TNSST: *"Di Balai Desa alhamdulillah ada pak dokter yang nangani dari Wawa dan Brawijaya. Alhamdulillah itu dua hari dua malam kan ga penak masio dikei jatah pangan, balik maneh"* ('At the Village Hall, thank God there was a doctor who took care of us from Wawa (Wawa Husada Hospital) and Brawijaya (Brawijaya University), thank God it was two days and two nights it was not good even if I was fed, I came back (to my house)')

Respondent #2NYWGY took one week in refuge: *"Jagalan kui ngungsine, lek mriki teng mburine SD teng ponakan e, ndek mburine omah mbak Lutfi seminggu"* ('Taking a refuge (at) Jagalan, if (taking a refuge) here it is behind the elementary school, at my nephew's (house), behind Ms. Lutfi's house for a week'),

Respondent #3NYTN took 10 (ten) days, according to his son's story: *"Pas pertama kali erupsi itu saya bawa lari*

Table 1. Description of informants along with complaints and health services during the Semeru eruption

Respondent Code	Age	Respondent		Place of Refugee	Illness	Disease Related/Disaster		Medical First Responder
		Yes	No			Yes	No	
#1NYSMT	69		√	-	Lipoma on the left chest		√	Volunteer
#2NYWGY	>100	√		Behind SDM 03 Oro-Oro Ombo Settlement	Rheumatic pain		√	Volunteer
#3NYTN	85	√			Unable to walk because of burns		√	Volunteer
#4TNSKR	52		√		Burns	√		Volunteer
#5TNMSL	74	√		Kalibening	Left leg wound while evacuating	√		Volunteer
#6TNNGD		√		Kali Lengkong	High blood pressure and vertigo	√		Volunteer
#7TNSST	60	√		Oro-Oro Ombo Village Hall	Shortness of breath/asthma		√	Volunteer
#8TNSML	54		√	-	Pulmonary tuberculosis		√	Volunteer
#9NYMSM	77	√		Kali Lengkong	Cancer in the left cheek		√	Volunteer
#10NYSTN	>80	√		Point 0	Rheumatic pain in the left thigh		√	Volunteer

ke rumahnya Pakdhe sana 3 hari kemudian hari ke-4 ke pemukiman disana 1 minggu" ('When the first eruption happened I took him to his uncle's house for 3 days, on the 4th day we moved to the settlement there and stayed there for 1 week').

Experiences gained by the eruption and pandemic survivors include burns, left leg pain, high blood pressure and vertigo, rheumatic pain, lump on the right side of the chest, not being able to walk because of burns, shortness of breath, pulmonary tuberculosis, left cheek cancer, and rheumatic pain in the left thigh.

Respondent (#1NYSNT) "*Awale niku alit bendol teng dodo, mboten ngerti nek nopo iku, ngge teros e uci-uci, wong mboten sakit*" ('At first (the lump) was small, a lump in the chest, I didn't know it, it looked like a mass, but it didn't hurt');

Respondent (#3NYTNT), a woman aged 85 years old who had difficulties in stepping before eruption caused by poured a hot fluid at her leg. "*Ngge waune kan kenek santan panas niku. Mantun ngoten terus awak e iku ngedrop terus mboten saget tangi*" (Previously, I poured by hot coconut fluid, then I felt drop and I can not able to stand up/mobilization');

Respondent (#2NYWGY), a woman aged over 100 years who suffered from rheumatic pain before the eruption: "*Ngge niko linu-linu dari dulu, pas erupsi soyo cenut-cenut*" ('It had been rheumatic pain ever since, during the eruption it was more painful');

Respondent (#7TNSST, 60 years old) with shortness of breath stated: "*Sesek maune mau bawa mesin nebul sendiri tapi gabisa*" ('Shortness of breath, (I) wanted to bring a nebulizer, but (I) couldn't');

Respondent (#8TNSML) with pulmonary tuberculosis, a 54-year-old man revealed: "*kula gadah riwayat sakit TBC mba, sakniki sampun pengobatan mlaku 8 wulan*" ('I have a history of tuberculosis, Ms., and now I have been on outpatient treatment for 8 months');

Respondent (#9NYMSM) aged 72, a grandmother with cancer in her cheek informed that: "*Sing penting kanker e wes gaonok, kanker niki*" ('The important thing is that the cancer has gone, this cancer'); and respondent (#10NYSTN), a grandmother aged over 80 who complained: "*Teng niki (dengkul), kaku, loro, linu*" ('Right here (her knee), (it feels) stiff, pain, rheumatic pain').

Meanwhile, 3 (three) respondents who are sick with diseases related to the disaster are respondent, when the eruption happened, said:

Respondent (#4TNSKR) "*Mbaknya juga luka bakar tapi masih lebih parah saya luka bakarnya*" ('My wife also had burns but mine was worse'),

Respondent (#5TNMSL) aged 74 who complained: "*Suku kulo kok loro niku moro yo setengah yaknopo nggih ketatap opo mboten semerep terus keblon awu, kulo tingal kok abuh*" ('I didn't know why I felt hurt in my foot, whether it was hit or something, then there was ash in it and I just realized it was swollen'), and

Respondent (#6TNNGD) when the researcher asked: "*Sakderenge mpun wonten darah tinggi?*" ('Did you suffer from high blood pressure?'), answered: "*Mboten, wonten e pas lahar niku*" ('No, I just felt it when the disaster happened yesterday').

During the eruption, almost all of the respondents received health care assistance from volunteers, both volunteers from local health workers (Pronojiwo Public Health Centre) and volunteers who provided health care assistance from outside Pronojiwo Sub-district.

Regarding to the respondents experience of health service from the local Health Volunteers in the nearest Health Unit, they stated as:

The respondent (#1NYSNT) according to information from his son said: "*Setelah vaksin itu terus dirawat luka sebelum vaksin, tapi tetep gaada perubahan, tapi dibersihkan aja (oleh perawat desa)*" ('After the vaccine, the wound before the vaccine was treated, but there was still no change, but it was just cleaned up (by the village nurse)');

Respondent (#4TNSKR) said, "*Kulo tasek nginep ten pasirian (Rumah Sakit) sedino suwengi, diterno ambulans, langsung teng RS. Mboten ten posko. Asal e dibeto ten puskesmas, kulo diinfus. Tapi kulo kados mboten semerep. Ditangleti kulo mboten ngomong. Taseh syok*" ('I was still staying at Pasirian (Hospital) for a day and night, taken by ambulance, straight to the hospital. Not to the post. At first, I was taken to a Public Health Centre, I was given an intravenous drip. But I didn't notice anything. When asked, I didn't speak. I was still in shock');

Respondent (#5TNMSL) said, "*Suku kulo kok loro niku moro yo setengah yaknopo nggih ketatap opo mboten semerep terus keblon awu, kulo tingal kok abuh nggih langsung niku angsal kaleh dinten terus dibetono nganu niku Lepen Bening (Puskesmas) di beto ten Wawa (Rumah Sakit)*" ('I didn't know why I felt hurt in my foot, whether it was hit or something, then there was ash in it and I just realized it was swollen, two days later I was immediately taken to Kali Bening (Public Health Centre) and brought to Wawa').

The respondent's experience in receiving services at a referral hospital turns out to be good.

Respondent (#8TNSML) who suffered from tuberculosis (pulmonary tuberculosis) and was treated at dr. Saiful Anwar Hospital, Malang City said, "*Seneng kula mbak, bangga. Teng Rumah Sakit Celaket, Malang aku seneng ditangani karo dokter e sae, di benakno infusku seng awale loro pindah nang tangan sijine ben ora loro, nggone penak. Aku takok penyakitku iki nyapo, jarene kakehan alkohol*" ('I'm happy, proud. At Celaket Malang Hospital (dr. Saiful Anwar Regional Public Hospital Malang) I was happy to be treated by a good doctor, adjusting the intravenous drip, which was initially painful then moved to my other hand so that it didn't hurt, the place is good. I asked about my illness and he said that I drank too much alcohol').

Respondent (#4TNSKR) who suffered from burns and was treated at dr. Haryoto Hospital, Lumajang Regency said, "*Pelayan kesehatannya alhamdulillah bagus, makannya gratis*" ('Thank God the health service was good, the food was free'), and

Respondent (#9NYMSM) who suffered from cancer and received radiotherapy at dr. Saiful Anwar Regional Public Hospital Malang said, "*Sae bu dokter e buk sabar ngoten buk, seneng kulo*" ('The doctor was Good, patient, I'm happy').

The referral mechanism obtained through Public Health

Centre and referral hospitals is running quite well and is not affected even in disaster and pandemic conditions. Referral to higher health facilities were received by:

Respondent (#4TNSKR, 52 years old) from Candipuro Public Health Centre to Pasirian Hospital then to Haryoto Hospital, Lumajang Regency, who said, *"Setelah itu saya diinfus di Candipuro (Puskesmas) sehari semalam lalu langsung dibawa ke RS Haryoto. Saya dirawat 39 hari, kalau mbaknya (Istri Pak Sukri) 17 hari. Cuma mbaknya di ICU terus karena tidak sehat dan 2 hari sebelum meninggal..."* ('After that, I was given intravenous drip at Candipuro (Public Health Centre) for one day and one night and then immediately taken to Haryoto Hospital. I was treated for 39 days, while my wife (Pak Sukri's wife) was for 17 days. The difference was my wife was in the ICU because she was not healthy and 2 days before she died...'),

Respondent (#5TNMSL, 74 years old) from the Pronojiwo Public Health Centre (in Kalibening Village) who was referred to Wawa Husada Hospital, Malang Regency said, *"Kulo mpun yo pancene keadaan mpun mboten nggadah nopo-nopo, kulo mpun panik..aduh dos pundi kulo niki..nopo-nopo mboten gadah pancene nggih langsung bidal. Di usahaken nopo iku di beto teng Wawa (Rumah Sakit), dugi ndek mriko nggih kulo setengah boten purun mboten nggadah nopo-nopo. Dadi kulo niku nggih mpun manah niku mboten tenang, mboten emut nopo-nopo saking bingung e kulo niku ngerasakaken...nggih sak aken ten yugo kulo niki...yugo nggih mboten nggadah..sing iso di beto yo di beto dugi dusun...dos pundi*

male bu, pancene keadaan pun koyok ngeten..ngantes saiki mboten mbeto nyambut gawe.. boten wantun bu, ngantos nedha niku nggih namung kulupan saking ajrih e, badhe mangan ulam klotok niku nggih boten wantun" ('I really didn't have anything, I had already panicked...what should I do, if I didn't have anything, but I needed to leave immediately. I was taken to Wawa (Hospital), I came there half-heartedly because I had nothing. So, my heart wasn't calm, I didn't remember anything because I felt very confused, I also felt sorry for my son, my son also didn't have anything... I brought anything I could bring from the village... but this is the reality... until now I haven't worked, I don't dare to do it, ma'am, I only eat boiled vegetables because I'm afraid, I don't dare to eat *pindang* (salted, seasoned, and smoked or boiled fish) either'), and

Respondent (#8TNSML, 54 years old) suffering from pulmonary tuberculosis who was immediately taken care of by the village government for a direct referral to dr. Saiful Anwar Regional Public Hospital Malang said, *"Aku digowo gawe ambulane Puskesmas neng Malang"* ('I was taken by an ambulance from Public Health Centre to Malang').

Treatment at the patient's home carried out by health workers continued despite the pandemic conditions and after the informants returned to their respective homes. The home visit experience was received by respondents, as explained below:

Respondent (#1NYSNT) who refused to be referred to a health facility due to fear of surgery, stating that: *"Tiang Ajrih niku darah e langsung munggah, ajrih e jare kate*

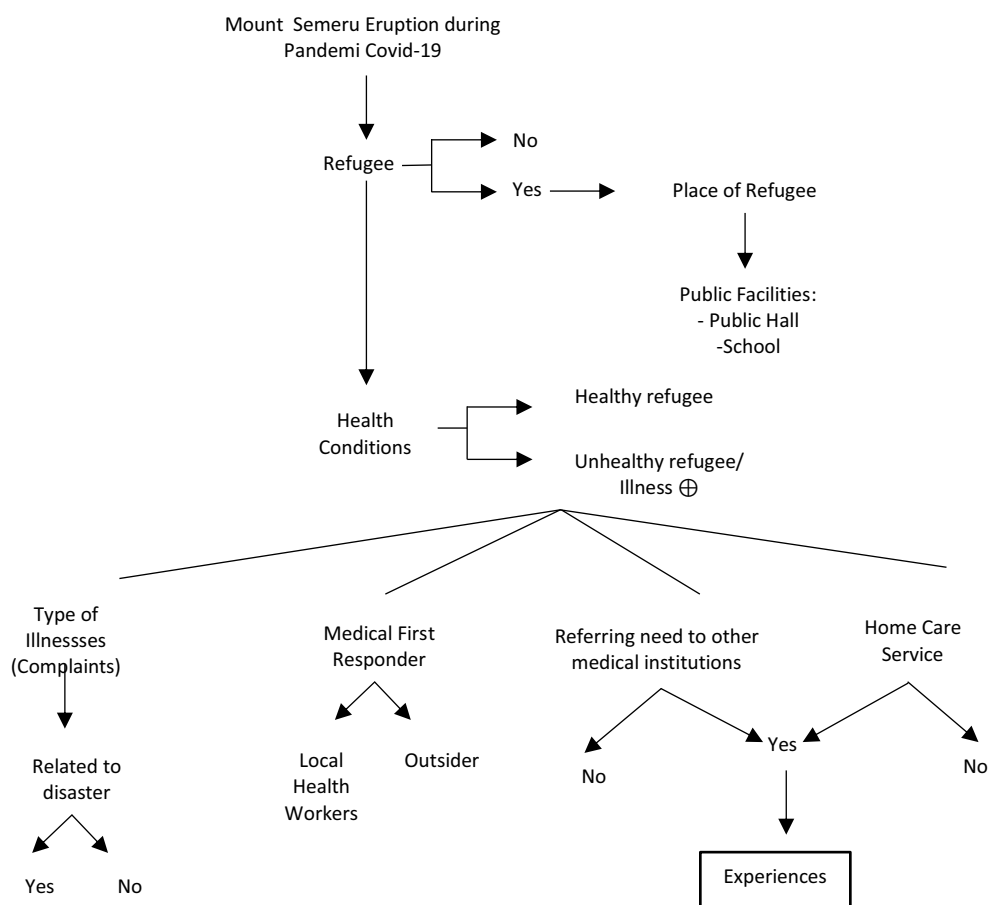


Figure 1. Summary of finding

dioperasi, wedi iku, wedi iku tok aku, wedi mati. Aku saiki batinku wis pasrah, opo jerene seng kuoso" ('People who are afraid, their blood will rise quickly, I was afraid that I would undergo surgery, I was afraid of that, that's all. I was afraid to die. I surrender to the power of God'), and continued the wound treatment by a nurse at home: *"Disuntik, mboten nopo-nopo lek diresiki karo mas Septian (Perawat desa), wedi diarani operasi iku tok ajrih"* ('Injected, it's okay if it's cleaned by Mas Septian (Village nurse), I was just afraid of being asked to undergo surgery').

Respondent (#2NYWGY) received a drug delivery facility from a local village midwife who was sent to the respondent's home: *"Ngge diparingi obat, obat gatal tapi mboten enten waras e namung teng ibuk niki (bu Ari, bidan desa) jodoh ne"* ('Yes, I was given medicine, itching medicine, but the medicine didn't work there, it was the medicine from Mrs. Ari (the village midwife) that worked') and felt comfortable.

The experience of respondents who received health services from health volunteers who came during the eruption was assessed or perceived as good by 8 respondents with the sentences: "sae" or good and "more suitable", "happy to be noticed". There was one respondent who did not answer when asked about the health services he received while in the refugee camp (Respondent #3NYTN), and another respondent (#8TNSML) was dissatisfied with the treatment at a Public Health Centre by saying: *"Tapi ngapunten niki lek teng Puskesmas mriki aku ngeroso dipersulit mergo gak diolehi muleh, 4 dino ora ono perubahan lan kejelasan aku kudu nyapo. Aku aku yo ditangani kambek petugas e puskesmas tapi ra ono perubahan karo kejelasan soal penyakitku mbak, makane jalok muleh"* ('But I'm sorry if I feel my treatment was made complicated by the Public Health Centre here because I was not allowed to go home, for 4 days there was no change and it wasn't clear what I should do. I was treated by health workers at the Public Health Centre but there was no change and there was no clarity about my illness, Ms., so I asked to go home').

The refugees mentioned about their perceptions and experiences during Mount Semeru eruption and Covid 19 pandemic: The medical conditions suffered, medical responder, referral experience, and homecare services (Figure 1).

DISCUSSION

Refugees

Most of the respondents involved in this study were refugees in Pronojiwo Sub-district, Lumajang Regency, namely in Oro-oro Ombo village area, the Settlement area, Kali Bening village, Kali Lengkong village, and "Titik O" ("Piket O", the name for the border between Pronojiwo Sub-district and Candipuro Sub-district, Lumajang). A place of evacuation or refuge is a place where refugees can feel safe, although the duration of refuge may vary depending on the level of security and comfort of the survivors. Three respondents reported being refugees for two days, seven, and ten days. The refuges can be a relative's house or a mass gathering place at that time which is considered the safest, such as a village hall or school. The term refugee refers to people displaced by

conflict, climate, and contagion. This broad definition often attempts to capture the basic feelings of people who were forcibly displaced from their homes and feelings of no return (4). While the meaning of refuge is a temporary residence where disaster victims evacuate, either in the form of mass or family shelters, or individual shelters which provide minimum service standards and are equipped with the basic utilities needed (5). However, the emergency response set by the government at that time was a month, so the time for the return of the survivors involved in this study had not reached the end of the disaster response period.

Disease Directly Related to Events (Disaster)

This study revealed that there was a third of the respondent's illnesses directly related to the eruption, while the others suffer from illnesses prior to the eruption. However, all respondents received health services, except for one respondent who did not respond and one who stated that he was not satisfied. Burns and injuries to the legs while evacuating are a direct impact of the disaster on the respondent's health, and post-eruption hypertension/vertigo due to stress from the loss of assets was an indirect impact on one respondent.

The injuries suffered by two respondents were caused by hot clouds carrying steam and dust from Mount Semeru. Both respondents were well cared for at the referral hospitals. In the cases that were not directly related to the disaster or the respondent did not want to be referred to a higher health facility, then the local health workers carried out home care or if there were still volunteers, the health volunteers served the eruption survivors by providing health service at the service post or visiting respondents' house.

Diseases related to events are divided into 'direct' and 'indirect'. 'Direct' is when a patient visits with an injury or illness directly caused by an emergency event, or sudden onset of disaster (e.g., fracture, burn injury, etc.). 'Indirect' is when a patient visits with an injury or illness caused or worsened by situational change after an emergency event (e.g., environmental exposure, diarrhea, skin disease, etc.). Disease non-related to the event are when a patient visits with a health problem that is not directly/indirectly related to the emergency event (e.g., non-communicable disease, cancer, etc.) (6).

Medical First Responder

Based on the results of the research on the role of volunteers during the eruption of Mount Semeru, volunteers were found to help all respondents affected by the eruption of Mount Semeru in December 2021. First responders are broadly defined as individuals who are first to arrive on the scene of an emergency, accident, or disaster, facing dangerous, challenging, and cumbersome situations to preserve and protect life, the environment, and property (7). They are further responsible for immediately reaching out to disaster survivors and providing physical and emotional support (8,9). Historically, first responders include firefighters, search and rescue teams, police, and emergency medical personnel (10). Medical volunteers are one of the components of the first responder who are expected to be in the disaster area as soon as possible to assist. At the time

of the eruption and this pandemic, medical volunteers have provided health services that are perceived as good by most of the respondents. Medical volunteers during emergency response, namely supporting activities in emergency response such as taking care of rations and evacuation, providing health services, providing logistics, and others, as well as playing the role of volunteers in post-disaster situations such as emergency repair and psychosocial recovery (11).

Home Care by Health Workers of Public Health Centre

Although local health workers are still working to overcome the pandemic, their role in visiting survivors is quite good, this is done by village midwives or Public Health Centre nurses in handling almost half of the respondents. These local health volunteers are very important in supporting the continuity of care because health volunteers from outside are generally limited in their capacity. In the case of one of the respondents with tuberculosis, the village official even helped to fetch the respondent to be referred to the hospital. This means that these health volunteers are not only health professionals, but also ordinary citizens or village officials.

It was identified that any form of nursing care services provided in the patient's home is called home care. These forms of care service vary ranging from facilitating the needs of the patient to performing basic nursing care and monitoring vital signs (12). Some home care is carried out by nurses or midwives. The nursing assessment includes gathering information about the patient's physiological, psychological, sociological, and spiritual needs. This is the first step in the assessment. The collection of subjective and objective data is an integral part of this process. Part of the assessment includes collecting data by obtaining vital signs such as temperature, respiratory rate, heart rate, blood pressure, and pain level using an age-or-condition-appropriate pain scale. The assessment identifies the patient's current and future care needs by enabling the formation of nursing diagnoses. Nurses recognize normal and abnormal patient physiology and help prioritize interventions and care (13).

Referral System

In this study, despite two conditions of uncertainty, namely natural disasters and pandemics, referral services for survivors who are sick and need further treatment can still be carried out properly. All respondents experienced good services at the hospitals where they were treated. The Referral system for health services is the implementation of health services that regulate the delegation of duties and responsibilities of reciprocal health services, both vertically and horizontally, which must be carried out by participants of health insurance or social health insurance, and all health facilities. Hospitals play an important role in dealing with all kinds of disasters, especially in terms of providing health services for the affected communities. Hospitals must be able to function during and after a disaster (14).

When hospitals fail to function in disasters and emergencies, either for structural or functional reasons, it becomes difficult to treat victims promptly when it is most needed. Thus, hospital preparedness is very important in dealing with disasters. That is with its inclusion in the Sendai Framework (an international document) for

Disaster Risk Reduction 2015–2030, which highlights the importance of making hospitals safe from disasters by ensuring that all new hospitals are built with a level of resilience that strengthens their capacity to remain functional in disaster situations, and implementation of mitigation measures to strengthen existing health facilities, particularly those that provide ambulances (15).

Perception of Care

'Quality of care' is a concept that can be given different meanings, depending on different cultures, whether it is on an individual level or a social level, which aspect we are looking at; process, structure, or outcome, whether it is the patients, the relatives, the healthcare personnel, the administrators or the politicians who define the term and the time at which it is defined (16) and it is considered by researchers to be a multidimensional concept (17).

Patients' perceptions of quality of care are important because they may reflect patients' defined quality. The quality of the healthcare system is a lumping parameter that reflects patient safety and satisfaction, service delivery efficiency, cost competitiveness, and aspects of sustainability. This knowledge can guide healthcare providers when they prioritize and can make them more responsive to the patient's needs and wants (18). Patients can define good quality, evaluate healthcare delivery and report their experiences. The patients' perspectives focus on aspects of importance to the patient (19). The perception or assessment of almost all respondents of health services during the pandemic and in disaster areas state that they are good. This assessment is very meaningful to be learned by all parties how to manage people's health with all limitations and emergencies. This assessment shows that the people's expectations and desires are met.

This study shows that health services during the pandemic and eruption were quite well received by the survivors. Most residents received health services for the first time during the eruption by health volunteers. The tiered referral system is going well, and all respondents who are treated at the referral hospital feel the service is good. There are disaster-related and non-disaster-related diseases. Local practitioner continue to take care of the health of the survivors in their respective homes.

ETHICS APPROVAL

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This study was reviewed and approved by the research Ethics Universitas Brawijaya Malang No. 81/EC/KEPK/03/2022.

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CONFLICT OF INTEREST

All authors report no competing interests. None of the authors have financial or institutional disclosures to report related to the research in this paper.

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