

Perspective of Fulfilling The Social Needs of Children Affected to The Mountain Semeru Eruption: Qualitative Study

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ABSTRACT

Indonesia is an archipelagic country located at the confluence of four tectonic plates and there are volcanic arcs along the islands of Sumatra-Java-Nusa Tenggara-Sulawesi. This condition causes Indonesia to be in a condition prone to natural disasters, especially volcanic eruptions. Disasters have a more serious impact on vulnerable groups. Semi-structured interviews were used to collect research data. Researchers collected demographic data at the research stage and then conducted direct interviews with research informants through in-depth interviews and Focus Group Discussion. A total of 24 participants were involved in this study which were taken using purposive sampling. The research was conducted on preschool and school aged children (3-12 years) who were affected by the eruption of Mount Semeru in Lumajang Regency, Indonesia. The Mount Semeru eruption disaster resulted in psychological problems in children because peer separation, behavior, and borderline personality disorder have been widely reported in volcanic eruption disasters. Good social support is an important aspect in the process of recovering children after a disaster. Rapid life changes encourage parents to adapt immediately to meet the needs of children.

Keywords: social needs, children, eruption, semeru

ABSTRAK

Indonesia adalah negara kepulauan yang terletak di pertemuan empat lempeng tektonik dan terdapat busur vulkanik sepanjang pulau-pulau Sumatra-Jawa-Nusa Tenggara-Sulawesi. Kondisi ini menyebabkan Indonesia berada dalam kondisi rentan terhadap bencana alam, terutama letusan gunung api. Bencana memiliki dampak yang lebih serius pada kelompok rentan. Wawancara semi-struktur digunakan untuk mengumpulkan data penelitian. Peneliti mengumpulkan data demografis pada tahap penelitian dan kemudian melakukan wawancara langsung dengan informan penelitian melalui wawancara mendalam dan Diskusi Kelompok Fokus. Sebanyak 24 peserta terlibat dalam penelitian ini yang diambil menggunakan purposive sampling. Penelitian dilakukan pada anak usia prasekolah dan sekolah (3-12 tahun) yang terkena dampak letusan Gunung Semeru di Kabupaten Lumajang, Indonesia. Bencana letusan Gunung Semeru mengakibatkan masalah psikologis pada anak-anak karena pemisahan dari teman sebaya, perilaku, dan gangguan kepribadian ambang batas telah banyak dilaporkan dalam bencana letusan gunung api. Dukungan sosial yang baik adalah aspek penting dalam proses pemulihan anak-anak setelah bencana. Perubahan hidup yang cepat mendorong orang tua untuk beradaptasi segera untuk memenuhi kebutuhan anak-anak.

Kata Kunci: kebutuhan sosial, anak-anak, letusan, Semeru.

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Introduction:

Indonesia is an archipelagic country located at the confluence of four tectonic plates and there are volcanic arcs along the islands of Sumatra-Java-Nusa Tenggara-Sulawesi. This condition causes Indonesia to be in a condition prone to natural disasters, especially volcanic eruptions (BNPB, 2021). Indonesia has 127 active volcanoes which are at a warning level which have a high potential for volcanic eruptions (BNPB, 2020). In December 2021, East Java, especially the Lumajang Regency, experienced a severe disaster due to the eruption of Mount Semeru which produced a burst of ash up to 15.2 km (OCHA, 2021b). Based on reports from the National Disaster Management Agency (BNPB) there was an increase in the number of victims to 15 people and 27 people were missing, and 169 people were injured. More than 1,700 people were displaced in 19 refugee camps, 5,205 people and 2,970 houses were affected throughout Lumajang and Malang Regencies, East Java Province, Indonesia. In addition, the eruption of Mount Semeru also affected 24 schools and 2,888 students (OCHA, 2021a).

Disasters have a more serious impact on vulnerable groups (Efendi et al., 2022). One of the vulnerable groups that need attention is children. It is estimated that 175 million children per year are affected by natural disasters, both physically and psychologically (Codreanu et al., 2014; Kar, 2009). Mental health consequences have been documented not only in post-traumatic stress disorder (PTSD) symptom rates, but also for depression and other mental health problems reaching 5-34%. (Dyregrov et al., 2018; Kar, 2009). Based on the researchers' initial study, there were several emotional mental problems experienced by children after the eruption of Mount Semeru, namely problems with peers (59.5%), behavior (16.2%), and borderline personality disorder (18.9%). Children affected by natural disasters need the attention of their parents and community support to reduce the stressors they experience (Dyregrov et al., 2018).

Children affected by disasters also experience the consequences of severe

psychological and social problems. Social support is one form that can be provided to disaster victims to overcome this. (UNICEF, 2019). Social support has an important role in providing protection to children after a disaster. This support is obtained from many sources such as parents and family, peers, teachers and schools, and other sources of support from the community (Pfefferbaum et al., 2015). Vulnerability factors in children are often associated with weak social systems and capacity to deal with disasters. Disasters cause the destruction of the existing social support system in the community so that protection for children is weakened (Bhadra, 2016). Parents, especially mothers, have an important role in providing social support to children (Nishihara et al., 2018).

Socialemotional development is a child's learning process in adjusting to understand the situation and feelings when interacting with people in their environment. In dealing with natural disasters, it is not only important to provide material assistance to children, there is something else that children need more, namely moral support. One thing that can be done is to provide psychosocial support. The word social refers to other people, social order, norms, values, rules, economic systems, kinship systems, religion or religion and beliefs that apply in a society. Psychosocial is defined as a dynamic relationship in interactions between humans, where the behavior, thoughts and emotions of individuals will influence and be influenced by other people or social experiences. Efforts or support made by individuals, groups or communities outside of a person (individual) in a social interaction in everyday life that is full of affection, love and protection, helps to adjust to problems or difficult situations faced (coping). For children, this support is important to help them develop self-esteem, a sense of togetherness, learning processes and develop life skills (life skills), participate in the social environment and have confidence in their future. Therefore, it is important to know how to fulfill the social needs of children who are victims of the Mount Semeru eruption.

Methods:

Research design

This study used a qualitative phenomenological research design to determine the social needs of children affected by the Mount Semeru eruption. (Neubauer et al., 2019). Semi-structured interviews were used to collect research data. Researchers collected demographic data at the research stage and then conducted direct interviews with research informants through in-depth interviews and Focus Group Discussion (FGD). The research was conducted from August to October 2022.

Research Sample

A total of 24 participants were involved in this study which were taken using purposive sampling. The research was conducted on preschool and school aged children (3-12 years) who were affected by the eruption of Mount Semeru in Lumajang Regency, Indonesia. Children are a vulnerable group, especially in disaster situations, so to avoid trauma or discomfort in the research process, the role of parents, especially mothers, is involved. Data collection in the study was also obtained through a FGD process involving parents of children who were affected after the disaster. This study involved 24 pairs of mothers and children, with the criteria being mothers who had children at least at preschool age and were indigenous people living in areas affected by the eruption of Mount Semeru.

Data collection

The collection of research data went through 2 stages, namely the preparation and implementation stages, in the preparation stage carried out by obtaining permits. The researchers and the team also developed question items and structured interview guidelines for FGDs and in-depth interviews. Both, there are some open-ended questions designed to explore the social needs of post-disaster children. At the research implementation stage, the researcher asked the participants' consent to conduct an audio recording of the interview to ensure that the data obtained could be analyzed in detail. The

interview process takes about 30-40 minutes. Retrieval of research data adapted to the local context to suit the conditions and comfort of research participants. The FGD was conducted with a small group consisting of 6 pairs of mothers and children, located in one of the residents' houses. The FGD is accompanied by one facilitator and one observer, as well as one research assistant who is tasked with facilitating activity needs.

Topic of interview and FGD

Children's Capacity as Unique Individuals in Post-Disaster Social Needs

- Experience before the disaster
- Services needed to fulfill roles and activities

Environmental Resources as Support for Children's Post-Disaster Social Needs

- Physiological Needs
- Comfort and Security
- Extra Internal and External Family Efforts

Children's Interaction with the Social Ecological System in Post-Disaster Conditions

- Environmental Influence on Children in Post-Disaster
- Adaptive Social Development of Children in Post-Disaster Conditions
- Anticipatory Efforts to Prevent Obstacles to Children's Development in Post-Disaster Conditions

Analysis Data

Interview data were transcribed verbatim using code numbers to protect the identity of research participants. Data is analyzed using the content analysis method to ensure the results obtained can achieve trust (*trustworthiness*) which covers *credibility*, *dependability* dan *transferability* (Graneheim & Lundman, 2004). The researcher also used field notes to help the researcher's interpretation. At the final stage of the analysis process, discussions were held with the research team consisting of 4 people to ensure transparency to increase the accuracy of this research.

Research Ethics Approval

This research has received ethical approval from the Health Research Ethics Committee of the Faculty of Nursing, University of Jember

with number 160/UN25.1.14/KEPK/2022. In conducting the research, the consent process for research participants was also carried out by giving written informed consent to children or parents before being involved in the research.

Results:

Table 1. Characteristics of Research Participants

Characteristics	n	%
Child		
Age		
Preschool (3-6 years)	8	33,3
School (7-12 years)	16	66,7
Gender		
Woman	12	50
Man	12	50
Mother		
Age		
20-30 years	8	33,3
31-40 years	16	66,7
Status		
Marry	10	83,4
Widow	4	16,6
Work		
Housewife	24	100
Religion		
Islam	24	100
Number of children		
1	2	83,3
> 1	22	16,7
Level of education		
Primary School	10	41,7
Junior High School	4	16,6
Senior High School	10	41,7
Income		
< Rp 2.000.607	24	100
> Rp 2.000.607	0	0
Total	24	100

Table 2. Research Themes and Sub-Themes

Theme	Sub Themes	Keywords
Self Capacity	Description	Identity (gender, parental status, education level, ethnicity, religion, occupation, income); necessities of life, wealth, health status, emotional status, self-concept
	Value	Well-being, life experience, meaning in life, character,

		decisions, influence
	Self Perception	Assume, respond, create, fulfill the role
Environmental Resources	Physique	Healthy life, good life, activity, food, sleep.
	Psychological	Trauma, psychiatric, behavioral problems,
	Convenience	Shelters and supplies, convenient toilet access
	Security	living in danger, unfit shelter
Social Ecology	Relationship	Connect with, connect, influence
	Activity	Be active, do things, finish, chat
	Satisfaction	Happy, fulfilling, fulfilling

Theme 1: Self Capacity

Description

"...Our ability to make ends meet varies depending on the condition of his family .." (P1)

"... I am self-aware that our family has to work hard to meet our daily needs because someone is sick, has an irregular job, and on average we only graduate from elementary school..." (P4)

Value

"...we have different perspectives because of the impact of this disaster, especially in spiritual matters and the meaning of life ..." (P1)

"...in our opinion, everything has changed, yes the character, nature, way of making decisions, and the meaning of prosperity between then and now ..." (P2)

Self Perception

"...we are different, if we judge ourselves, we must have changed ..." (P2)

"...There are many things that influence the way we approach life and our assessment of abilities ..." (P5)

Theme 2: Environmental Resources

Physique

"...We need help to be healthy, so we can eat and sleep healthy" (P5)

"...if you think about it, what you need from around you is food and a house.." (P8)

Psychological

"...If it's raining, you can't sleep because you're afraid.." (P1)

"..My child, when it's cloudy, doesn't dare to go out, wherever it is at that time, he doesn't go out, once he doesn't come home from school because it's cloudy when he comes home, he doesn't come home until the afternoon, so he goes to school ..." (P3)

Convenience

"... it's uncomfortable here because it's far from everything, if you want to go shopping to the market, it's far..." (P6)

"... There are toilets here but they're uncomfortable because they're still temporary buildings, sometimes animals also come in..." (P3)

Convenience

"...you need to be safe, not like before, if you can't sleep at night you're worried that lava will suddenly come, now it's safe because it's not a lava location..." (A8)

"...the important thing is safe Ma'am, the place and facilities, not like in the evacuation ..." (P10)

Theme 3: Social Ecology

Relationship

"....Happiness is when you can reconnect with your family, acquaintances from your village of origin, now that's how neighbors get along and help each other, Alhamdulillah, I'm happy.." (P5)

"....It's nice to be connected to a lot of friends, there are here but not many, in a lot of schools, the school is far away, so I rarely play, after school I go straight home..." (A7)

Activity

"...Daily activities when not farming, usually hanging out with neighbors ..." (P2)

"...with friends playing activities together, playing bicycles, that's it, don't go to the park because it's too far, don't dare..." (P3)

Satisfaction

"..If you say you're not satisfied yet, because it's not the same as your place of origin, but thank God, being grateful is better than being evacuated..." (P3)

"...Satisfied with moving to a house, not in an evacuation center where there are lots of people, crowded and often fighting ..." (P9)

Discussion :

The purpose of this research is to explore children's social support after a natural disaster. The following themes have been explored in the interview process with the respondents:

Self Capacity

After the disaster the respondents had different living needs. Conditions were difficult to deal with after the disaster, especially with uncertain jobs and relatively low education. Fulfillment of needs is closely related to the post-disaster economy. The difficulty of finding a job after the disaster is the most complained obstacle to rebuilding life and making ends meet (Rouhanizadeh et al., 2020). Crowley (2021) also revealed that low education is a social vulnerability in post-disaster recovery. Low education makes it difficult for families to survive extreme events and long-term recovery (Ribeiro et al., 2018).

The value of life after a disaster is very impactful in terms of spirituality and the meaning of life. The urge for rapid change makes it difficult for parents to adapt so that it affects decision making and shifts in the meaning of well-being. Changes in the value of life after a disaster reflect the ability to adapt to changes, problems, illness, pressure, failure and painful feelings closely related to the process of post-disaster recovery. (Bakic & Ajdukovic, 2019). The experience of natural disasters has an impact on the level of one's perception of happiness and life satisfaction directly and indirectly, thereby affecting one's well-being (Cui & Han, 2019). This affects a person's perspective in self-assessment and those around him.

Self-perception is influenced by safety and past events. Post-disaster conditions certainly

changed the self-perception of respondents, especially in addressing life and self-assessment. In a post-disaster situation one needs to have faith in one's ability to overcome difficult life. Individual beliefs make an individual contribution in displaying one's abilities thereby influencing motivation and life experiences (Kılıç & Şimşek, 2019).

Environmental Resources

Physical needs which include health assistance, food, decent housing are needed in post-disaster situations. Post-disaster situation the physical environment is relatively polluted which has an impact on health, appropriate health care is needed to reduce physical health symptoms such as respiratory, digestive and neurological symptoms, together with a general assessment of physical health (Lowe et al., 2018). Physical recovery, such as adequate and nutritious food supply, is needed to prevent vulnerability to disaster victims (Sumasto et al., 2019). Adequate and safe housing is a consideration for disaster victims. Several victims of the disaster experienced serious problems in adapting to their new environment, but occupying their old homes became a concern for the victims, so they tended to leave their old homes. The comfort of the house is due to several factors such as the physical and social environment that supports it (Kürüm Varolgüneş, 2021).

Post-disaster events caused psychological problems for respondents. In children who are classified as vulnerable to experience fear if the weather is not good. This proves that children's experiences that are not wearing, such as a disaster, act as predictors that affect the child's psychology. This problem is closely related to post traumatic disorder (PTSD) in children if it is not treated immediately (Inoue et al., 2019). The sudden move to a new place also has an impact on children's psychology, because children are forced to adapt to a new environment (Myles et al., 2018). An unpleasant experience if not addressed immediately causes severe trauma to the child so that the child lacks focus on others and generates self-motivation

and is less oriented to others to help (Kuriansky, 2019).

The comfort of living space is often a complaint for respondents. The difficulty of access to meet needs and the presence of animals entering the house disturb the comfort. The conditions of a new residence for children and discomfort can cause psychological symptoms, especially separation from peers and parents who died as a result of a disaster (Olness, 2022). In addition, the availability of easy access is needed to meet daily needs, so that the physical needs of families and children are properly met (Lowe et al., 2018).

A safe and non-traumatic environment is required for respondents. This is related to the location which is far from disaster-prone, and the facilities provided to the new housing are proper. A comfortable environment reduces the negative impact on the child's psyche, this is related to optimal child growth and development (Inoue et al., 2019). A safe environment away from sources of disaster hazards reduces emotional disturbances in children such as aggression, excessive fear, anxiety, withdrawal and learning difficulties (Bothe et al., 2018).

Social Ecology

Good relations are important for respondents in society. Children need relationships with friends to fulfill social aspects, but after natural disasters there are changes in children's socialization such as reduced friends, rarely playing and other activities. Changing social relations have an impact on recovery after trauma so that the child's recovery becomes longer. Social relations can be sourced from parents and peers, each of which has a different impact on the child's trauma recovery (Lai et al., 2018). Parents' social support included items on whether their parents understood or wanted to hear about the child's problems. Forms of peer social support included items on whether they had friends who understood them, who they could talk to, and who they spent time with (Oe et al., 2018).

Parents' activities after the disaster did not differ much from before. Children can also still play with peers in the surrounding environment. Playing is a child's natural mechanism for accelerating post-disaster trauma rehabilitation and has a central role in the social-emotional aspect of child development (Qiang et al., 2020). Healing of traumatic experiences in children is aided by opportunities for emotional expression, cognitive understanding, and behavioral or fantasy changes that occur during play. (Cohen & Gadassi, 2018). Parenting styles that may be more protective of children affect threat processing in children that have a negative impact on previous trauma. The bio-ecological model explains that children's vulnerability to stress due to natural disasters depends on their social context, such as parents and peers (Kessel et al., 2019).

Respondents expressed satisfaction and gratitude when living in a new place. Even though it's not your own house and it's not like an old house the place is now comfortable rather than a refuge for too many people. Post-disaster phenomena such as loss of material causes an emotional response that ends in despair and anxiety. Natural disasters encourage a person to adapt quickly, especially in a new place, where this can cause anxiety for everyone (Knez et al., 2018). Adequate new housing for disaster victims is important to start life and the post-disaster recovery process. Children as a vulnerable group will find it difficult to adapt in a new place because of different places and different friends. So that aspects of the physical environment, social life of the new place are very important for the recovery of disaster victims (Lai et al., 2020).

Limitation:

The sample may not be representative of the population, as one temporary shelter location was targeted. Control over the data collected was reduced, due to the inclusion criteria being too general. Future research is expected to be able to establish stricter criteria, such as length of time in refugee camps, and health history of mothers and children, as well

as covering a wide range of temporary shelter locations.

Conclusions:

The Mount Semeru eruption disaster resulted in psychological problems in children because peer separation, behavior, and borderline personality disorder have been widely reported in volcanic eruption disasters. Good social support is an important aspect in the process of recovering children after a disaster. Rapid life changes encourage parents to adapt immediately to meet the needs of children. The new living environment is very important to support growth, development and social activities to speed up the recovery process. Handling child psychological problems requires good synergy from many sectors which are expected to speed up the process of recovering from child trauma after a disaster. We would like to thank the University of Jember, especially the Faculty of Nursing. This project would not have been possible without the financial support of the KeRis-Dimas grant.

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