

The Role of Petra School in Trauma Healing of Children of Mount Sinabung Eruption Victims, North Sumatra

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Abstract. This study aims to examine the role of emergency schools in trauma recovery among children affected by the eruption of Mount Sinabung, North Sumatra. The research method used was a survey, 60 children were selected as respondents. The results found that 60 child respondents consisted of, 47.69 % of boys and 52.31 % of girls, with 76.93 % of elementary school education, 15.38 % of junior high school and 7.68 % of senior high school. The results of respondents' answers indicate, there is a scale of child stress, scale of symptoms of child trauma in the amount that is still tolerated. Fulfillment of psychological needs to eliminate trauma (trauma healing), by singing, dancing, painting, educational material, psychological mental development so as not to saturate, mental mental strengthening services, information and education.

Keywords: Petra School, Trauma Healing

1 Introduction

Mount Sinabung, or also called Deleng Sinabung in the Karo language, is one of the mountains in Karo District. The volcano as high as 2,460 meters above sea level (masl) is formed on the Northwest edge of the Toba Tua basin fault. The Strike Slip fault line along the western boundary of Toba, the upper part of which forms the Sinabung volcano continuously to the Northeast to the Sibayak volcano is a second-order fault (Suprpto, 2015). In August 2010 the Sinabung volcano changed from type B to type A due to volcanic activity in the first eruption. After that, Sinabung volcano was silent for 2 years and erupted again in September 2013, and is still erupting to this day. Sinabung volcano activity continues to fluctuate fluctuatively. The "Beware" status has been enforced during November 23, 2013 to April 8, 2014 and after that dropped to "Alert". Many scientists and volcano experts try to examine the activities of the Sinabung volcano because there are not many records in history that indicate the pattern of its activity.

The very long duration of Sinabung volcano activity has caused a large influx of refugees. In 2010, when the status of the mountain was raised to the "Beware" level, around 12,000 residents were evacuated to safe areas. Even so, the condition of the Sinabung volcano which tends to be unstable could make some residents nervous to return to their homes. However, in the period 2013-2014, a big eruption occurred again and made residents from 17 villages and 2 hamlets must be evacuated. Not only refugees, the eruption of the Sinabung volcano accompanied by hot clouds in February 2014 caused 17 deaths, 14 people died on the spot and another died in hospital due to burns.

According to the Center for Volcanology and Geological Disaster Mitigation (PVMBG) recommends that residents in 15 villages and 2 hamlets remain displaced. Villages whose residents must continue to flee are Mardinding, Perbaji, Selandi, Sukameriah, Kinayan, Gamber, Berastepu, Bekerah, Simacem, Sukanalu, Kuta Tonggal, Siggall-garang, Kuta Rakyat, Kuta Gugung, Kuta Kuta, Sibintun Hamlets and Lau Kawar Hamlet. The National Disaster Management Agency (BNPB) said the eruption activity of Mount Sinabung has decreased, although the number of refugees reached 30,177 people or 9,388 heads of household (Ameilia, 2014). Natural disasters are events that are difficult to avoid and cannot be predicted in a timely manner and place. The impact of disasters in the form of loss of life, property, damage to infrastructure, social environment, and disruption to the life and livelihoods of the community around the disaster site.

Mount Sinabung eruption victims are susceptible to trauma due to the loss of loved ones, property, houses and rice fields which have destroyed their livelihoods. Conditions in refugee camps are not feasible, the number of refugees is increasing, the length of life in the refugee indefinitely has an impact on the psychological condition of refugees. They are a group of people who are vulnerable to psychological disorders, as well as children living in refugee camps. Studies on natural disasters were carried out, among others by Fahrudin (2010), who found that children affected by the Tsunami in Aceh experienced trauma, as well as children who were victims of the landslide disaster in Garut, experiencing the same conditions. Disasters cause various impacts, especially psychosocial direct victims (primary victims) and indirect victims (secondary victims). Various obstacles for child protection in handling natural disasters in Indonesia include:

- 1) There is no law on disaster management.
- 2) There is no formulation of a policy regarding special protection for children in emergency situations.
- 3) Disaster management has so far been centered on the rescue phase of victims, and has not yet touched on the restoration of children's rights to disaster victims.
- 4) Limited knowledge of parents and the community about child protection, especially in disaster situations.
- 5) Limited resources for the protection of child victims of disasters.
- 6) Coordination and cooperation between institutions has not been effective in protecting against disaster victims.

Law Number 35 of 2014 concerning Child Protection Article 59 paragraph (2) which explains what groups of children are entitled to special protection, including children in emergency situations. Then children in this emergency situation are detailed again in Article 60, including children who become refugees and children who are victims of natural disasters. Article 59A describes specific protective measures for them, including prompt treatment (physical, psychological and social treatment and / or rehabilitation, as well as prevention of diseases and other health problems). Meanwhile, their rights are regulated in Article 62, namely:

- 1) Meeting basic needs consisting of food, clothing, housing, education, health, learning and recreation, security guarantees, and equality of treatment; and
- 2) Meeting the special needs of children with disabilities and children with psychosocial disorders.

In line with that Presidential Regulation No. 7 of 2005 concerning the National Medium-Term Development Plan 2004-2009 in Chapter 12 states, one of the main activities of the Child Welfare Improvement and Protection Program is the Development of Protection Mechanisms for Children in Special Conditions, such as natural and social disasters (including

conflict). Studies or studies on disasters have concluded that victims have similarities in terms of reactions experienced. In general, Barret (1996) explains, three different periods: impact period, only lasts during a disaster event; the "cooling" period of the recoil period, which takes place within a few days after the event; post-trauma period, which can last a long time and even throughout life. The post-traumatic period also takes place when disaster victims struggle to forget the experiences that occur, in the form of stress, physiological and psychological disorders due to the disasters by their experiences.

Symptoms of post-traumatic stress disorder can last for a long time (Saigh, 1999). A study by Alexander (2010) showed that the frequency of symptoms of post-traumatic stress disorder (PTSD) in Hurricane Andrew Hurricane Andrew children in Florida, United States. Therefore, preliminary research on trauma healing in children affected by the eruption of Mount Sinabung needs to be done to detect psychological problems experienced by children in refugee camps. This study aims to obtain data on trauma recovery for children who are victims of the eruption of Mount Sinabung, specifically describing stress, trauma symptoms and the potential for violence among children affected by the eruption disaster, especially in Mount Sinabung, North Sumatra.

Protection of victims of natural disasters is not only related to physical healing, but also important is the handling of trauma wounds caused by disasters. Because in general children are more susceptible to prolonged trauma than adults, so there is a decrease in mental quality which impacts on a decrease in quality of life. Therefore, handling trauma (traumatic healing) should be the focus. Based on the reasons for the importance of handling trauma (traumatic healing) in children, an idea emerged in the form of a comprehensive education program, dealing with emotional, intellectual, and spiritual problems for children victims of natural disasters. This idea was given the name Petra School (Trauma Management). The problem of handling child victims of natural disasters was answered using the Petra School program. The Petra School Program has several stages in dealing with trauma to children affected by natural disasters, including:

First stage

The initial step in this program is the identification of problems, which is collecting data on the victims of children including their age, gender, physical condition, and family condition through field surveys or interviews with disaster victims.

Second stage

Specify the problem. After the data is collected the children of victims of natural disasters are grouped into several groups according to the criteria of each child who has more or less the same or similar criteria.

Third stage

After identification and specification of the problem, the third stage is handling trauma according to the problems the child has. This treatment has four points in finding solutions to trauma problems, namely physical, emotional, intellectual and spiritual. Because these four points are the principle of balance in human life.

The Petra School Program aims to provide guidance to fellow students, the community, or volunteers who work directly in dealing with disaster victims, especially in dealing with children, so that they can take appropriate action in accordance with the personality development and traumatic level of children. The formation of Petra school with a structured

curriculum, accompanied by observations of the development of children of victims of natural disasters is expected to provide benefits that are able to eliminate trauma and restore children's condition and improve their self-quality.

2 Method

This research is descriptive qualitative (Chatarina and Enny, 2012), carried out in three evacuation posts, consisting of KNPI Command Post in Kabanjahe (consisting of Sigarang-garang community), GBKP Command Post of Kodim Dormitory (Central Kuta community and Sigarang Garang community), and Post LOSD Katepul (Sukanalu community and central Kuta community). Data sources of the study were 60 children respondents, from a population of 300 children who were recorded as refugees around the Mount Sinabung location. Data collection was carried out by observation, distribution of questionnaires, and interviews from various literature study sources such as research conducted by Putri Cep Alam, et al (2015). Reduction of data obtained from the problems studied. Data display, shows the researched data, traces the meaning or interpretation of the research findings, if the conclusions still doubt the data can be added (Moleong, 2002).

After the questionnaire was collected, trauma healing was carried out by gathering children in tents and treated to social stories, invited to educational games, such as healthy living campaigns, mutual cooperation and cooperation, storytelling, singing (Schneid, 2000). The children were then given milk, bread, and stationery and were asked about their feelings and opinions while in refugee camps, a method used as a form of trauma healing for children to explore the psychological value of the eruption effects of Mount Sinabung.

3 Result And Discussion

The results of observations and assistance made by volunteers from the Education Foundation (Edu-F) and the Indonesian Red Cross (PMI) can be concluded, that the limitations of Bathing and Washing facilities, inadequate clean water, less comfortable living quarters, limited availability of food and drinks in refugee camps caused most refugees to experience psychological pressure due to the Mount Sinabung disaster. From a sample of 60 respondents, children from 2 sex groups, namely 47.69% boys and 52.31% girls, with three levels of schooling, namely elementary schools (SD 76.93%; 28 boys (56%), and 22 girls (44%); SMP (15.38%; 2 boys (20%), 8 girls (80%) and high school (7.68%). The results of the study as in table 1 show the percentage of 20% boys and 80% girls experienced high stress around the Mount Sinabung location, North Sumatra.

Table 1. Children's Stress Scale

No	Statement	Range of answer value scales											
		1			2			3			4		
		SD	SMP	SMA	SD	SMP	SMA	SD	SMP	SMA	SD	SMP	SMA
1.	Easy to whine	3	1	0	25	3	4	8	2	0	7	3	0
2.	Want something right away	3	0	0	8	4	0	9	5	2	23	0	2
3.	Do not want to sleep alone	12	5	0	6	2	4	15	1	0	10	1	0
4.	Trouble sleeping	12	1	0	7	4	2	20	4	2	4	0	0
5.	Nightmare	6	0	0	9	4	1	24	5	3	4	0	0
6.	Fear without the right reasons	8	3	0	10	2	2	20	4	2	5	0	0
7.	Looking worried	8	2	0	6	5	3	24	1	1	4	1	0
8.	Cry without a good reason	12	3	0	15	2	3	19	4	0	2	0	0
9.	Look sad and withdrew	6	1	0	16	3	2	17	4	2	3	1	0
10.	Must always be accompanied	7	0	0	19	6	4	11	2	0	6	1	0
11.	Looks very active	5	0	0	21	3	4	9	5	0	7	1	0
12.	Easy to get angry	7	0	0	27	3	4	5	1	0	4	5	0
13.	Easily frustrating	9	2	0	21	3	4	7	4	0	6	0	0
14.	Complaining to be sick	8	1	0	23	3	4	6	5	0	7	0	0
15.	Bedwetting, nail biting	18	8	0	21	1	4	3	0	0	2	0	0
16.	Easily disturbed something	7	2	0	22	2	4	11	2	0	3	3	0
17.	Acting aggressively	11	2	0	20	6	4	6	0	0	8	1	0
18.	Describe traumatic events	7	3	0	21	2	4	11	2	0	4	1	0
19.	Talk about traumatic events	7	3	0	22	4	4	11	2	0	7	0	0
20.	Avoid talking	8	3	0	22	4	4	8	1	0	6	1	0
21.	Fear of something traumatic experienced	8	3	0	15	3	3	12	3	1	8	0	0
22.	Nightmare due to traumatic	7	6	0	22	1	4	8	2	0	4	0	0
	Total	179	49	0	378	70	72	264	59	13	119	19	2

Source: Respondents' Answers (N = 60)

Karo Regency is a slope area of Mount Sinabung. This region is rich in water resources, horticulture and the potential for ecotourism which is oriented towards the activities of the Mount Sinabung ecosystem. Data collected by the Karo District Health Office said that the number of victims of the Mount Sinabung eruption was not in the form of fatalities but victims of agricultural and horticultural products, plus the emergence of flu, coughs, colds, respiratory disorders, skin diseases, diarrhea and disorders psychic and mental, due to conditions uncomfortable environment, less clean and completely limited. Lack of clean water is available, to provide for the government through the public works department to provide public toilets that can be moved and to drop clean water to the evacuation site.

Victims of natural disasters face very complex situations and conditions, the most fundamental problems are the problems of eating, drinking, shelter, health, and education, supported by research conducted by Ameilia (2014) and data collected from mass media sources (Ebo, 2010). This starts from the limited public facilities, social and environmental sanitation that is inadequate, causing discomfort, and can even be a source of disease at the evacuation site, including respiratory problems, diarrhea. The results also show the symptoms of trauma in children based on 20 questions categorized, the level of the scale of trauma symptoms of children is high, can be seen in table 2.

Table 2. Children's Trauma Symptoms Scale

No	Pernyataan	Rentang skala nilai jawaban								
		1			2			3		
		SD	SMP	SMA	SD	SMP	SMA	SD	SMP	SMA
1.	Hearing hear ambulance sirens	32	10	4	8	0	0	1	0	0
2.	Do not want to play with friends	30	6	2	9	3	2	2	0	0
3.	Draw something superfluous	23	4	4	18	5	1	1	0	0
4.	Aggressive	17	6	1	21	3	2	3	0	0
5.	Nightmare	11	3	0	24	6	2	4	0	2
6.	Fear without the right reasons	18	6	0	22	3	4	2	0	0
7.	Looking worried	15	4	1	19	6	2	5	0	1
8.	Look sad	24	7	4	11	1	0	5	0	0
9.	Withdraw	21	4	3	19	4	1	1	0	0
10.	Must always be accompanied	26	5	4	16	4	0	1	0	0
11.	Looks very active	27	2	3	10	6	0	3	1	1
12.	Easy to get angry	31	3	2	7	3	1	8	3	1
13.	Easily frustrating	27	4	2	5	4	2	9	1	0
14.	Complaining to be sick	26	3	3	10	3	0	5	3	1
15.	Suspicion of being overly foreign	32	5	3	3	3	0	7	1	1
16.	Easy against the rules	28	10	3	8	0	1	2	0	0
17.	His view is blank	29	6	3	9	3	1	3	0	1
18.	Make a picture of a traumatic event	34	5	4	6	4	0	4	0	0
19.	Fear of soldiers / police	29	6	4	4	1	0	7	1	0
20.	Fear of loud noise	35	6	2	1	0	1	3	3	1
	Total	515	105	52	230	62	20	76	13	9

The loss of a family member, especially a source of income, often leads to feelings of worry, anxiety, fear, prolonged sadness, even severe trauma in a person. Lack of fulfillment of life needs, not optimal implementation of functions and roles of families and the possibility of loss of self-control, disappointment with the services provided by the government can potentially be a social action in the community. The thing that creates a condition of discomfort is that they are easily ignited by fellow refugees due to saturation living in refugee camps (Chatarina and Enny, 2012). According to the Deputy for Emergency Management at BNPB (2013), some conditions of adult refugees are unstable and depressed, while refugee children are traumatized to hear loud noises and thump at the shelter. As many as 2900 refugee children who were victims of the Mount Sinabung eruption in Karo District, North Sumatra continue to study in the closest schools to the refugee camps determined by the Karo Regency Education Office by relying on teachers from the school concerned. There are 2,856 refugee children, consisting of 1,579 elementary school students, 835 junior high school students and 442 high school students.

Handling and protecting children in an emergency situation at the disaster site, especially due to the eruption of Mount Sinabung cannot be carried out exclusively, it requires the involvement of many parties, including the ministries of education, social affairs, NGOs, the community and those who are related, have commitment, responsibility, and are expected can coordinate synergistically. Fulfillment of the rights and obligations of a child during the emergency and post-emergency response period (rehabilitation and resocialization) concerning the fulfillment of children's basic needs in education, health, social and welfare must be guaranteed by the state. Treatment needed to reduce psychological disorders is to eliminate trauma to victims by entertaining them, teaching them to control their emotions, providing training and coaching, so that they are not bored. The trauma healing activity at the refugee camp carried out by volunteers Edu-F and PMI, which was attended by 60 children from three locations (Desa Sigarang-garang, Sukanalu and Kuta Tengah) affected by the eruption of Mt. Sinabung, was carried out by making entertainment and games that were of a nature education.

Volunteers organize play activities such as drawing, coloring, and group games and singing, the aim of which is to eliminate boredom in children while in evacuation. Besides that, they also listen to stories from children in an effort to express their expressions. Other activities, with a healthy lifestyle campaign, do not litter, wash hands with soap, defecate in the bathroom, use masks during Sinabung eruption, sing, tell stories with local wisdom and sports games, such as jumping and running. Questionnaire answer data from 60 respondents of children of victims of Mount Sinabung expressed feelings of sadness, disappointment and anger due to the eruption of Mount Sinabung. The ease of education in refugee camps is group learning, free sports in the field, such as playing soccer and badminton, religious activities and Sunday school, while all respondents (100 percent) miss their hometown, the desire to go home immediately, get back together with friends and go to school.

4 Conclusions

Protection of children in an emergency situation at the disaster site, especially due to the eruption of Mount Sinabung cannot be carried out exclusively, it requires the involvement of many parties, including the ministries of education, social, community and those who are related, have commitment, responsibility, and are expected to coordinate synergistically. The Petra School Program is designed to address the problem of handling trauma in victims of natural disaster children. Stages of handling trauma Petra schools are first started with the identification of the problem, the second problem specification and the third problem solving. Trauma healing is recommended to be carried out routinely and continuously so that children still have the spirit of learning and are motivated in living a temporary life in refugee camps.

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