# **Quality of Life Refugees' Children of Mount Sinabung Eruption**

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#### Keywords: Life quality, children, mount Sinabung

Abstract: This study aimed at identifying the life quality of refugee's children of the Mount Sinabung eruption. The design of this study was descriptive method. The population in this study was 137 children aged 8-16 years, and were all selected as samples using total sampling technique. The instruments used were questionnaire adapted from paediatric quality of life inventory (PedsQL). The research was located in the refugee shelter of the Mount Sinabung eruption in Sigarang-garang village. The results of the study presents that the characteristics of respondents were aged 13 years (27%), female (54.7%), studying at junior high school (54.7%), Islam (63.50%), experiencing diarrhea (70.80%), house was ruined and unable to be occupied (100%). The findings also reveal that the respondents often feel scared (19%), sad (19.7%), afraid of other children's mocking (16.1%), forget various kinds of thing (17.5%), and experience difficulties in doing schoolwork (17.5%). The conclusion can be drawn that the children's quality of life is bad (86.5%). Then, it is expected that nurses plan activities that enable and empower children to improve the quality of life of children.

## **1** INTRODUCTION

Quality of life is a subjective perception of satisfaction or happiness in life in a domain that is important to individuals. The three main domains that are assessed for quality of life are physical, psychological, and social domains. Quality of life is influenced by various factors including health conditions along with its treatment, socioeconomic status, parenting, and the environment in which a child is raised. Health condition is an important aspect to contribute to children's life quality, so it has another definition dealing with quality of life that is related to health which is then called health related quality of life (HRQoL).

Factors that cause constraints in the protection of children affected by natural disasters in Indonesia include: 1) the absence of a law on disaster management; 2) there is no policy formulation on special protection for children in emergency situations such as natural disasters; 3) disaster management has so far focused on the stage of rescuing victims and has not touched on the recovery of the rights of child as victim of disaster, 4) limited knowledge of parents and the community about child protection, especially in disaster situations; 4) limited resources for protection of child as victim of disasters 5) interagency coordination and cooperation has not been effective in efforts to protect children (Nugroho.et. all. 2012).

Disaster is defined as a condition that cannot be predicted when and where it will occur. When it occurs, it will have a systematic impact on all lines of social life. Not only infrastructure, social systems, and economic order, but also the psychological impact will also be part of the disaster. Mount Sinabung is one of the active mountains in Indonesia.

Mount Sinabung is situated in Karo regency, North Sumatera. Based on data from the National Disaster Management Agency or Badan Nasional Penganggulangan Bencana (BNPB), since it was declared as an active mountain on August 29, 2010, it has continuously erupted and caused both loss of life and material loss. In 2017, it spitted out volcanic ash and incandescent lava as far as 500 meters: level of activity is in the level IV (alert).

Protection of victims of natural disasters is not only related to physical healing, but also related to

Quality of Life Refugees' Children of Mount Sinabung Eruption. DOI: 10.5220/0008395000002442 In Proceedings of the Aceh International Nursing Conference (AINC 2018), pages 91-94 ISBN: 978-989-758-413-8 Copyright © 2022 by SCITEPRESS – Science and Technology Publications, Lda. All rights reserved

trauma handling especially for children. In general, children are more susceptive to prolonged trauma than adults, resulting in a decline in mental quality that affects the quality of life of children (Nugroho et al. 2012).

In accordance to the background stated in advance, this study is aimed at identifying the quality of life of refugees' children of Mount Sinabung eruption.

### 2 METHODS

The research design applied in this study is descriptive. The population in this study were children aged 8-16 years old totalling to 137 people. The sampling technique used is total sampling.

The instrument used was questionnaire which was adapted from paediatric quality of life inventory (PedsQL). This study was conducted at the Mount Sinabung eruption shelter in Sigarang-garang village starting from April to October 2018. The research was conducted after obtaining permission and ethical clearance.

### **3 RESULTS**

Characteristics of refugees' children as respondents of this study are illustrated in table 1. The majority of respondents were 13 years old (27%), female (54.7%), studying at junior high school (54.7%), Islam (63.50%), having diarrhea (70,80%), with house had been ruined and unable to be occupied (100%).

Variables	f(%)
Age	
8 y.o	8(5.8)
9 y.o	4(2.9)
10 y.o	4(2.9)
11 y.o	3(2.2)
12 y.o	19(13.9)
13 y.o	37(27)
14 y.o	32(23.4)
15 y.o	26(19)
16 y.o	4 (2.9)
Gender:	
Male	62(45.3)
Female	75(54.7)
Educational level	
Elementary school	62(45.3)
Junior high school	75(54.7)
Religion	
Islam	87(63.50)
Christian	50(36.49)
Illness that have ever been suffered	
Diarrhea	97(70.80)
Upper respiratory tract infection	40(29.19)
Parents' status	
Alive	137(100)
House condition	
Ruined and unable to be occupied	137(100)
Problem identification	
Menstrual hygiene management	75(54.7)
Personal hygiene	137(100)
Spiritual needs	137(100)

Table 1: The characteristics of respondents (n=137).

Then, the distribution of respondents' answers on quality of life are also various as presented in table 2. The respondents often feel scared (19%), feel worried that something would happen (14.6%),

feel sad (19.7%), afraid of other children mocking (16.1%), and forgetting various kinds of things (17.5%).

	Never	Almost never	Sometimes	Often	Almost always
Statements	F(%)	F(%)	F(%)	f(%)	f (%)
Hard to walk more than 100 m	85(62.0)	4(2.9)	38(29.7)	7(5.1)	3(2.2)
Hard to run	71(51.8)	5(3.6)	39(28.5)	14(10.2)	8(5.8)
Hard to exercise	78(56.9)	4(2.9)	48(5.5)	7(5.1)	0(0)
Hard to lift heavy weight	59(43.1)	10(7.5)	57(41.6)	10(7.3)	1(0.7.)
Hard to take a bath alone	95(69.3)	2(1.5)	10(7.3)	23(16.8)	7(5.1)
Hard to do house chores	75(54.7)	5(3.6)	32(23.4)	22(16.1)	3(2.2)
Feeling pain	44(32.1)	9(6.6)	75(54.7)	9(6.6)	0(0)
Feeling weak	40(29.2)	8(5.8)	81(59.1)	7(5.1)	1(0.7)
Feeling scared	30(21.9)	1(7.0)	74(54.0)	26(19.0)	6(7.4)
Feeling sad	15(10.9)	3(2.2)	88(64.2)	27(19.7)	4(2.9)
Feeling angry	36(26.3)	10(7.3)	76(55.5)	16(8.8)	9(2.2)
Having sleep problem	57(41.6)	11(8.0)	61(44.5)	6(4.4)	2(1.5)
Feeling worried about something will happen	31(22.6)	6(4.4)	74(54.0)	20(14.6)	6(4.4)
Hard to communicate with other children	81(59.1)	9(6.6)	41(29.9)	6(4.4)	0(0)
Other children don't want to be friend	73(53.3)	11(8.0)	49(35.8)	4(1.9)	0(0)
Other children mocking	40(29.2)	8(2.2)	72(52.0)	22(16.1)	0(0)
Unable to do something done by other teenagers	67(48.9)	4(8.0)	58(42.3)	1(0.7)	0(0)
Hard to be involved in group	83(60.6)	9(6.6)	38(27.7)	6(4.4)	1(0.7)
Hard to be concentrate on school lesson	51(37.2)	5(3.6)	76(52.6)	7(5.1)	2(1.5)
Forgetting many things	42(34.4)	8(5.8)	74(54.0)	24(17.5)	0(0)
Having difficulty doing school assignment	28(20.4)	8(5.8)	74(54.)	24(17.5)	3(2.2)
Absent due to unwell	25(16.8)	17(12.4)	94(68.6)	2(1.7)	1(0.7)
Absent due to going to doctor or hospital	67(48.9)	14(10.2)	55(40.1)	1(0.7)	0(0)

Table 2. The distribution of respondents' answers on quality of life (n=137).

### 4 **DISCUSSION**

Sigarang-garang village is located on the north side of Mount Sinabung. It is one of the worst affected areas by the eruption. Since December 2013, this village has got the effect of the eruption of Mount Sinabung. All infrastructures were damaged, including people's agricultural land which has been the main source of income. In Monday morning on February 19, 2018, Mount Sinabung re-erupted with a roar, cold lava flood and the formation of explosion hot cloud.

There are 50 families who still live in the surroundings of Sekolah Dasar (SD) or elementary school Sigarang-garang. Based on the results of the study, the majority of respondents were 13 years old (27%), female (54.7%), studying at junior high school (54.7%), Islam (63.50%), having diarrhea

(70,80%), house is ruined and unable to be occupied (100%). This is in line with the results of the study conducted by Herdwiyanti & Sudaryono (2013). They claim that it is estimated that around 66 million children worldwide are affected by the disaster every year. More than 300,000 residents were affected by the Mount Merapi eruption where 100,000 of them were children. Children surviving from disaster also lost their homes and beloved ones. They also suffered injuries and experienced psychological trauma.

The results showed that respondents often feel scared (19%), feel worried that something would happen (14.6%), feel sad (19.7%), afraid of other children mocking (16.1%), and forgetting various kinds of things (17.5%). These results are in line with the research of Rhoads & Donnelly (2010) which states that 60% of children experience

separation anxiety and 30% experience general anxiety, with symptoms that is having difficulty attending school because of the emotional stress, especially anxiety due to depression. Furthermore, it was also found that 2% of all respondents were school-age children. Children who refuse to attend school are 5%. Girls and boys who experience anxiety aged in 10-13 years old are 4%.

Anxiety that arises in the victims of the Mount Merapi eruption are fear of earthquake, seeing mountains, roar, erupting mountains, seeing parents unable to go to the fields, crops are damaged, fear of going to play, to school, the atmosphere of a new place for example in refugee camps and teacher changes in new schools, and other things that can remind them of the volcanic eruption events (Zailani et al. 2009).

The results of the study also obtained data that respondents often have difficulties in doing schoolwork (17.5%). The eruption of mount Sinabung occurred since 2013 and nowadays, SD 040478 Sigarang-garang has been no longer functioned due to heavy damage. Students were transferred to other elementary schools in the neighbouring village namely Raya village. During the ride at this school, respondents had to go to school during the day which caused them to feel sleepy because they were not used to school in that time. In addition, the learning facilities at the shelter or evacuation centre are not adequate. So, the respondents find it difficult to learn and do Zailani et al, 2009, Keperawatan Bencana. Forum homework from school.

#### **CONCLUSION** 5

Based on the data analysis, it can be concluded that the life quality of refugees' children of mount Sinabung eruption is classified as bad (86.5%). Furthermore, it is expected that nurses plan an education and teaching strategy that can enable and empower children to improve the life quality of children.

#### ACKNOWLEDGEMENTS

The writers would like to express appreciation to The Ministries of Research, Technology and Higher Education of Indonesia for funding the research grant no 121/UN5.2.3.1/PPM/KP-DRPM/2018.

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