

Research Article

Women's traumatic experience in a permanent shelter after volcanic mud flow in Magelang, Indonesia

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Received: 21 October 2015

Revised: 31 October 2015

Accepted: 13 November 2015

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ABSTRACT

Background: A natural disaster event may cause property loss and affect people's health. Shelters are arranged for victims to live after disasters. Living in shelters is recognized as traumatic experiences, especially women. Psychological changes may occur due to disaster impact.

Methods: This study was qualitative study using phenomenology approach. In this qualitative study, participants were recruited at a permanent shelter in Magelang. The qualifying participants were met the inclusion and exclusion criteria. Data collection using recorder, interview guideline, and field note.

Results: 5 women (age 21-50) were involved in this study. In theme analyses, the results found four themes related to women's traumatic experiences after volcanic mud flow. The themes were psychology respond, cognitive respond, social interaction, and meaning of live.

Conclusions: Women who lived in permanent shelters have greater risk for traumatic experiences. Reducing the risk is needed. Government and social organization need to work together to provide some activities that suitable for women. By doing some activities, women can improve their social interaction with neighbourhood. Increasing the social interaction can help women to cope with stressful condition. Improving social interaction also can reduce the traumatic feeling because women can share their experiences with others.

Keywords: Women, Volcanic, PTSD, Shelter

INTRODUCTION

Natural disasters are traumatic event. Natural disasters caused infrastructure damage, ecological changes, and human death. This situation influenced victim's health, including physical and mental health. Previous studies had been found that disaster can increase levels of anxiety, depression and post-traumatic syndrome disaster.¹⁻⁵

Indonesia is one of the countries that have higher prevalence in natural disasters. Indonesia is in the fifth rank for natural disasters, especially geophysical and meteorology disaster.⁶ In 2010-2011, there were several

mud lava floods in Indonesia.⁷ The mud lava floods caused 6 people death, 261 people injured, and 6,732 people lived in shelters. In 2010, there was volcanic mud flow in Magelang, Central Java. This mud lava flood caused 4,111 people lived in shelters.⁸

Lived in shelters was different with previous condition before disaster happened. Even though there are some standards for shelters, shelters usually more crowded and limited in facilities.⁹ In shelters, refugees were difficult to get clean water and access for health care facilities. In addition, refugees had to live together with other in crowded place.¹⁰

On the other hands, the displacement, living in shelters, also contributes to stress and uncertainty experienced for refugees. One of study found that displaced people were more likely to get distress and symptoms associated with posttraumatic stress disorder (PTSD) and depression.¹¹ Another study found that displaced people were experiencing more distress over the loss of property, uncertainty about necessities, loss of social network, and uncertainty about future.¹²

Women are vulnerable group after disaster.¹³ Some studies found that women get higher for the incidence of post-traumatic stress disorder (PTSD) than men after disaster experience.^{14,15} The women survivors of disaster experienced multiple losses.¹⁶

This condition could affect refugee's mental condition, especially women, even couple years after disaster happen. It could be seen in interview that researcher did in permanent shelters in 2013. Some women said that they still remembered when mud lava flood happened and the condition when they have lived in temporary shelters. They also said that sometimes they cried when they remembered that. Therefore, the aim of this study was to explore women's traumatic experiences that lived in permanent shelters after volcanic mud flow.

METHODS

Study design

This study was qualitative study. This qualitative study used descriptive phenomenology approach. A descriptive phenomenology approach was consisting of 4 steps. They were bracketing, intuiting, analyzing, and describing.

Study participant

This study was using purposive sampling method to choose participants. It also had inclusion criteria. The inclusion criteria was women, age around 20-60 years old, lived in Larangan permanent shelter, had PTSD, and willing to join this study. The number of participants was 5.

Time of study

This study was conducting around September to November 2014.

Instrument

This study was used interview guideline. The interview guideline included women's perception about mud lava flood, changing the happened in environment, family, friends, and significant others, experiences during lived in temporary shelters and permanent shelters, and the way they lived in permanent shelters.

Procedure

There were two processes to conduct this study. The first process was getting permission. Researcher got permission from village office. The second process was collecting data. In this process, researcher was interviewing participants that fulfilled inclusion criteria.

Data analysis

The data analysis in this study was using Analysis method that common used in phenomenology study is Colaizzi's method.¹⁷

RESULTS

Characteristic of participants

There were five participants in this study. The characteristic from five participants was women that aged around 21 to 50 years old. All of the participants were lived in permanent shelters more than 1 year with their family. Five participants were Moslem and form Java tribe.

The assessment of traumatic condition was using Impact of Event Scale (IES) with scoring ≤ 12 was mild traumatic, 13-32 was moderate traumatic, and ≥ 33 was severe traumatic (PTSD). The results from five participants were four participants had severe traumatic (IES 34-44) and one participant had moderate traumatic (IES 32).

Theme analysis

Based on data analysis, there were 4 themes that explained women's traumatic experience during stayed in Larangan permanent shelter after volcanic mud flow. The four themes were psychology respond, cognitive respond, social interaction, and meaning of life.

Psychology respond was feeling that participants when they lived in a permanent shelter and directed to emotional problems. Psychology respond was include three categorizes. There were anxiety, trauma, and tried to adapt. For cognitive respond, this theme had two categorizes. The two categorizes were remembering the event of mud lava flood and flashback the past.

The third theme was social interaction. Social interaction was interaction among people in permanent shelter and women's activities in permanent shelter. This theme had two categorizes. There were togetherness and aloofness. The fourth theme was meaning of life. This theme showed how participant interpreted what happen after volcanic mud flow. This theme had one categorize, feel close to God.

DISCUSSION

Psychology respond

Psychology respond is individual's changing of feeling and/or behavior caused by traumatic events. That person tried to remove those feeling, but those feeling still exist and continuing. This condition affects psychology respond. Psychology respond in people with traumatic experiences were fear, anxiety, and sad.¹⁸ Fear is one of symptom of Post-Traumatic Stress Disorder.¹⁹ Different people could experience different symptom of Post-Traumatic Stress Disorder.⁸ This condition also existed in this study. The result of this study showed that five participants had different score. The result found that one participant had mild trauma and four participants had severe trauma. The different result could happen because the difference of coping strategies that used by participants.⁸

Coping is an effort to manage stress (internal or external) that the individual feels more than their ability to adapt.²⁰ Coping is referring to the way of facing with the negative experiences.²¹ Coping strategies can be used individually, vary from person to person. Many factors can influence the way of coping.¹³

There are three functions of coping. The first function is to deal with social and environmental demands. The second function is to develop the motivation to meet those demands. The last function is to maintain psychological equilibrium in order to focus on external demands.²² This reference supported our study. In our study, one of categorize from psychology respond was tried to adapt. Women tried to adapt because they needed to adjust with social and environment demands due to changing after a volcanic mud flow.

Coping strategies is one of predictor factor for women's health after disasters. Previous study found several factors after disasters that influenced mental health. One of the factors was coping type.²³ Women's coping strategy was one of important factor that influenced health and had positive relation with good quality life.²⁴ One of coping strategy was Emotional focused coping. Emotional focused coping, such as self-acceptance, humor, adaptation, and positive thinking, had positive relation with women's mental health.²⁵

Cognitive respond

Cognitive respond is thinking process that people used in adaptation respond. Cognitive respond could change depend on situation. Traumatic events that stored in someone's memory could affect someone's feeling and behaviour. On the other hand, feeling and behaviour could influence someone's physical condition.⁸ Traumatic events could cause cognitive changes and in the end could affect growth of external control locus.²⁶

This study found two categorizes in cognitive respond. Those two categorizes were remembering the event of mud lava flood and flashback the past. Flashback the past was common symptom in Post-Traumatic Stress Disorder.⁸

Social interaction

Social interaction had a positive association with mental health. People with good social interaction usually had good social support. People with good social support had a good mental health.²⁷ Lower of social support was one of the risk factor for psychosocial problem after an earthquake.²⁸ It means social support is one of the factors that affect women's mental health and help women to cope with their condition.

This study found two categorizes in social interaction. Those two categorizes were togetherness and aloofness. The togetherness means togetherness among people who lived in permanent shelters. The aloofness means aloofness with people who live in origin before volcanic mud flow. This condition happened because there was different perception between people who choose lived in permanent shelters and people who stayed in origin.

Meaning of life

Meaning of life is a value that has specific meaning and important for someone. When someone found meaning of life, this person would feel that his life is precious and meaningful. Meaning of life contained the aim of life.⁸

When someone had meaning of life, closely they had purpose in life.²⁹ Finding the meaning of life is more important after someone faced severe trauma. A previous study found that people with purposeless in life after faced an earthquake were easier suffer from PTSD than people with purpose of life.³⁰ Other study also found that survivors from a natural disaster with a higher purpose in life were significantly associated with positive emotion rather than presence of PTSD symptoms.³¹

This study found one categorize for meaning of life. This categorize was close to God. These categorize was confirmed by five participants. After they lived in permanent shelter and experienced volcanic mud flow, they felt that they closer to God than before. The previous study also found the same result. Women who lived in shelter after Merapi Mountain eruption used religion activities to adapt with a new environment. They also liked to do religion activities together.¹³

CONCLUSION

Women who lived in permanent shelters have greater risk for traumatic experiences. Reducing the risk is needed. Government and social organization need to work together to provide some activities that suitable for women. By doing some activities, women can improve

their social interaction with neighbourhood. Increasing the social interaction can help women to cope with stressful condition. Improving social interaction also can reduce the traumatic feeling because women can share their experiences with others.

ACKNOWLEDGEMENTS

Authors are very grateful to the all of Faculties in Faculty of Health Sciences for the support during this study conducted. They would also like to thank all of the participants in this study who showed great cooperation during interview session.

Funding: University of Muhammadiyah Magelang

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Purborini N, Amin MK. Women's traumatic experience in a permanent shelter after volcanic mud flow in Magelang, Indonesia. *Int J Res Med Sci* 2015;3(Suppl 1):S104-8.