THE EFFECT OF FAMILY COUNSELING ON ANXIETY DURING PRE-ERUPTION AMONG MERAPI MOUNT RESIDENTS

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ARTICLE INFO	ABSTRACT
	Pre-eruption is one of the factors that trigger anxiety because residents cannot predict when a disaster will occur. Providing counseling with a family approach is a process of support in dealing with problems so that it can reduce anxiety. This study to examine the effect of family counseling on reducing anxiety during pre-eruption. It was quasi-experimental one-group design with a pre-test and post-test. There were 49 residents with moderate to severe anxiety using purposive sampling. The measurement of anxiety score using Zung Self-Rating Anxiety Scale. The bivariate analysis was carried out by parametric test using paired t-test. The result showed that p-value 0,00 (p < 0,05), indicated a significant difference anxiety score in pre-test and post-test. There was an effect of family counseling on anxiety during pre-eruption among residents. Counseling can be used as an intervention in the family to reduce anxiety.

INTRODUCTION

Eruption is a volcanic eruption is part of volcanic activity. The dangers of volcanic eruptions can be in the form of hot clouds, ejected material, heavy ash rain, lava, poison gas, tsunamis and lava floods. Volcanic eruptions occur because of the movement or activity of magma from the stomach trying to get out to the earth's surface (BNPB 2017).

One of the volcanoes that is still active in the province of Central Java is Mount Merapi. Geographically, the location of Mount Merapi from the south side is in the

Sleman Regency area, the west side is in the Magelang Regency area, the north and east sides are in the Boyolali Regency area and the southeast side is in the Klaten Regency. In 2010 the eruption of Mount Merapi occurred which was one of the largest eruptions in the history of the eruption of the mountain (BMKG, 2018).

There are two types of volcanic eruptions, namely primary and secondary hazards. Primary hazard is a hazard that directly afflicts the population when an eruption takes place. For example, hot clouds, hot air as a side effect of hot clouds, and large ejection of material to gravel. While secondary hazards occur indirectly and generally take place after the eruption has occurred, such as cold lava which can cause land and settlement damage (Rahayu et al., 2017). Sari (2017) explained that the consequences of volcanic ash rain and volcanic gases resulting from eruptions were the emergence of various health problems related to the respiratory tract such as acute respiratory infections, impaired lung function, and asthma (shortness of breath). Basically, volcanic ash and volcanic gases do not directly cause death, but will slowly disrupt a person's respiratory system and tract to the extent that the person's organs are capable of.

The eruption also has a psychological impact, namely feelings of fear and stress. Many deaths occur in the elderly due to feelings of fear and stress. In addition, there were several victims who died from diseases such as sudden heart attacks, strokes, as well as victims who were already sick before the eruption. This condition is more due to people's psychological feelings of panic, anxiety, shock and fear which actually exacerbate the pain. Some mothers who are pregnant die from premature rupture of membranes, and some babies are born prematurely who cannot survive (Sari, 2017).

Disaster is a condition that cannot be predicted when and where it will occur. Disasters are events or series of events that threaten and disrupt people's lives and livelihoods caused, both by human factors, resulting in human casualties, environmental damage, property losses, and psychological impacts. When a disaster occurs, it will have a systematic impact on all lines of social life. Not only infrastructure, social systems, and economic order, but the psychological impact will also be part of the disaster. Natural disasters are one of the factors that trigger anxiety, because humans cannot predict when a natural disaster will occur (Erita, et al. 2019).

Anxiety is a response to a real threat. Someone feels anxious when there is uncertainty in the future (Lubis, 2019). Anxiety or anxiety is an emotional assessment and response to something dangerous (Celikol et al., 2019). Anxiety is closely related to feelings of uncertainty and helplessness. Anxiety is an excessive feeling of fear, anxiety, impending disaster, worry or fear of real or perceived threats (Hamid, Keliat, & Putri, 2020).

Previous studies have shown that natural disasters increase anxiety. Like Mamesah's research (2018) with the title Overview of Anxiety Levels in Residents Living in Landslide-Prone Areas in Ranomuut Village, Manado City. It shows that there is a level of anxiety from mild to severe anxiety in residents living in disaster areas, namely landslides. Likewise, Purwastuty's research (2019) with the title Community Anxiety Against Flash Flood Disasters in Batuganda Village, Lasusua District, North Kolaka Regency. There was a moderate level of anxiety in the flash flood disaster community in Batuganda village.

Previous research conducted by Kurniawati (2018) to find out the level of anxiety after the eruption of Mount Merapi in Jrakah Village, Selo District, Boyolali Regency. The type of research used is quantitative with descriptive survey method. The results showed that most of the people living in areas prone to the eruption of Mount Merapi experienced anxiety and the most severe anxiety.

Pre-eruption is a condition that cannot be predicted when and where it will occur. Preliminary study among Mount Merapi residents found 37 residents experienced moderate anxiety and 12 residents experienced severe anxiety. The anxiety felt by residents due to uncertain conditions and the impact that would occur if an eruption occurred. Celikol et al. (2019) stated that anxiety is an emotional assessment and response to something dangerous. Anxiety is an excessive feeling of fear, anxiety, impending disaster, worry or fear of real or perceived threats (Hamid, Keliat, & Putri, 2020).

Interventions must be carried out to overcome psychological disorders, one of which is the anxiety experienced by residents in the pre-eruption period. at least it can be avoided if there is assurance from the helper to provide assistance, protection, assistance when these feelings occur (Sumirta et al., 2019). Providing counseling to families becomes a process of assistance in solving problems or disorders. Counseling is expected as a medium for families to adapt effectively to changes and their environment (Sari, 2020; Purnamaningrum, 2013).

Counseling is an appropriate medium in creating family collaboration with health workers. Family counseling is needed as an intermediary that can help solve various life problems as a whole. The need for counseling is the basis that arises from within and outside the individual, raising questions regarding what the individual should do. The purpose of counseling is that the family can solve as many problems as possible that interfere with their thoughts and behavior, so that the family is able to solve the problem itself (Lubis, 2017; Sari & Afifah 2022).

Providing effective family counseling is expected that the family can understand and understand the problems faced in the pre-eruption period. Furthermore, families are able to develop their potential for disaster preparedness, so that anxiety does not arise. Based on the background and phenomena described, this study aims to examine the effect of family counseling on reducing anxiety during pre-eruption.

RESEARCH METHOD

This study uses a quasi-experimental research design in the form of post-test and pre-test one group design. This study does not have a comparison group, but the pre-test that has been done can provide a basis for testing the changes that occur after giving family counseling. The family counseling process is carried out by researchers using counseling steps, which include the stages of problem identification, diagnosis, prognosis, treatment, evaluation or follow-up. At the end of the study, a measurement (post-test) was carried out as a counseling effect so that it was known the comparison of subjects before and after being given family counseling.

The subjects of this study were residents with moderate to severe anxiety as many as 49 people who were taken using purposive sampling technique. This study contains the independent variable is counseling and the dependent variable is anxiety during pre-eruption. The instrument for measuring anxiety levels in this study used the Zung Self-rating Anxiety Scale (SAS/Z-RAS) questionnaire which was developed based on symptoms of anxiety (Zung, 1971).

The research data collected was then processed. Univariate analysis was conducted to describe the residents' anxiety during the pre-eruption before and after the intervention. Bivariate analysis aims to compare the differences in anxiety levels during the pre-test and post-test. The normality test was carried out first on the anxiety variable in order to determine the statistical test to be used. The normality test used the Shapiro-Wilk test

with a sample size of less than 50. The results of the normality test showed that the data distribution was normal (p-value > 0,05) so that the bivariate analysis was carried out by parametric test using paired t-test.

RESULT AND DISCUSSION

Univariate Analysis

The univariate analysis described the anxiety during pre-eruption among residents before and after intervention.

Table 1. Anxiety score during pre-eruption among residents

Variable	Mean	Min - Max	Std. Deviation
Anxiety score before intervention	55,53	46 – 66	5,65
Anxiety score after intervention	39,57	25 – 61	8,13

The results of the study describe the average anxiety score before the intervention is 55,53 and after the intervention is 39,57. Research conducted by Mamesah et al. (2018) stated that most people who live in disaster-prone areas experience anxiety, especially moderate anxiety. The results of the same study show that most people who live in areas prone to anxiety and the most are moderate anxiety (Lamba et al., 2017).

Anxiety is a vague fear accompanied by feelings of uncertainty, helplessness, isolation, and insecurity. Anxiety is an emotional state without a specific object. It is triggered by the unknown and accompanies all new experiences (Stuart & Sundeen, 2016). Someone feels anxious when there is uncertainty in the future (Lubis, 2019). Anxiety or anxiety is an emotional assessment and response to something dangerous (Celikol et al., 2019). Anxiety is an excessive feeling of fear, anxiety, impending disaster, worry or fear of real or perceived threats (Hamid, Keliat, & Putri, 2020).

In this study, it was found that the majority of the pre-eruption anxiety level categories in the respondents were moderate. The anxiety felt by respondents was characterized by symptoms of more tension, decreased concentration and perception, conscious but narrow focus, developing physical symptoms such as headaches, difficulty sleeping and frequent nightmares. Moderate anxiety allows a person to focus on what is important and puts others aside, so that the individual experiences selective attention, but can do something more focused (Stuart & Laraia, 2015).

Bivariate Analysis

The bivariate analysis analyzed the differences in anxiety score before and after the intervention.

Table 2. Results of paired t-test on the mean scores of pre-test and post-test anxiety score

Variable	Mean	Std. Deviation	p-value
Anxiety score before intervention	55,53	5,65	0,00
Anxiety score after intervention	39,57	8,13	

There was a decrease in the mean value of anxiety score before and after the intervention. In addition, paired t-tests obtained p-value 0,00 (p < 0,05), indicated a significant difference anxiety score in pre-test and post-test. The result concluded that there was an effect of family counseling on anxiety during pre-eruption among residents.

The results of this study indicate that counseling is effective in reducing pre-eruption anxiety, as is the case with Suryani and Rahmawati's research (2018) which proves that family counseling is effective in improving quality of life. Family counseling helps a person to understand and solve the problems they are experiencing.

After counseling, respondents are better able to carry out controlling anxiety which can have an impact on the family. Families will respond to problems experienced by family members positively, adjust to the environment and will provide good care. In the counseling process, families learn to understand the problems they face so they can be wiser in responding to the conditions that occur and ultimately eliminate the negative psychological effects that arise (Sari, 2020).

Counseling in health is an effort given by nurses to help clients holistically to deal with actual changes by providing emotional, psychological, intellectual and spiritual support (Potter & Perry, 2005). Counseling is a nurse's role that aims to help solve client problems. Counseling is given to instill adaptive coping (able to accept reality). Client problems need to be solved through the development of adaptive coping mechanisms. Counseling has to do with knowledge about the problems provided by the counselor. This is based on the theory that counseling is a process in which a professional person tries to help others in achieving self-understanding, making decisions and solving problems at hand. Counseling is designed to help clients understand and explain their perceptions of problems, and to help achieve their goals through a choice of solutions that have been well identified, and have meaning for them through problem solving emotionally and interpersonally (Nasrudin & Mukarromah, 2010).

Providing counseling significantly reduces the burden on the family. Counseling for families in this study aims to help family members in the family system to develop their potential to the fullest and anxiety can be overcome. Family counseling is carried out on the basis of a desire to help all family members, willingness and love for family. Furthermore, counseling that is carried out together focuses more on problems related to family situations and sees as a whole that the problems experienced by a family member can be more effectively overcome if it involves all family members (Sari, 2020; Sari & Afifah, 2022)..

CONCLUSION

The results of the study concluded that there was an effect of counseling on anxiety during pre-eruption in the residents of Mount Merapi. Counseling can reduce anxiety where families can adapt to changes and understand the problems they face. Through counseling nurses provide assistance in solving problems so that it can reduce respondents' anxiety.

Anxiety in residents during pre-eruption needs to be intervened so as not to disrupt the family system. Therefore, community nursing care for disaster-prone residents

should be provided. Counseling can be used as an intervention in the family to reduce anxiety.

This study uses a quasi-experimental design without a control group so that it is hoped that this research can be developed using a more research design. In addition, it is hoped that counseling interventions can be developed in research to address other health problems.

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