



Analysis of Disaster Preparedness Knowledge and Skill Among Teachers at Middle School and High School, South Lampung

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Abstract

Disasters happened at South Lampung. There were tsunami, Anak Krakatau eruption, and now also Covid-19 pandemic. It makes sense that people overthere should have a tool to prepare themselves cope the crisis and traumas they face related to disasters. As the goverment states that the community is the spearhead of the crisis; it should be understood that the community has to have the strength to cope the disasters by itself, too. Some findings showed that teacher has some aspects that could help increase the disaster preparedness in the community. Teacher will increase the emotion stabilization of their students. It means that teacher should be the one who give the tool to prepared the disaster they face, such as Psychological First Aid (PFA). This study were aimed to determine the level of disaster preparedness among the teachers of Middle and High School at South Lampung. The subjects of this study were 273 Middle and High School at South Lampung. Research data collection was done through the distribution of PFA questionnaires. A statistical quantitative descriptive approach was applied. The data showed that the teachers understand about giving Psychological First Aid as a disaster preparedness; which was showed with the frequency of the high knowledge of PFA of 62,63 %, the frequency of the moderate knowledge of PFA of 35,53%, the frequency of the low knowledge of PFA of 1,84%. We are optimist that the knowledge of the disaster preparedness among teachers will help student overcoming some psychological distractions or traumas at shool related to the disaster crisis.

Keywords: disaster preparedness, Psychological First Aid, crisis, trauma

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INTRODUCTION

This Various disasters have arisen or occurred in South Lampung. Not only local, such as the tsunami and earthquake that occurred several times and some time ago, but also a global disaster. On December 22, 2018, a tsunami hit several of them, namely the coastal areas of Pandeglang, Banten, and South Lampung districts that night. The high waves were caused by the increased activity of the Anak Krakatau Volcano; which then

causes sea levels to rise and sweep away villages or settlements and tourist areas that are within the reach of the tsunami. Currently, the issue of disaster that has emerged is increasing with the corona pandemic. High incidence rates occur in the world, including in Indonesia. As of May 4, 2020, corona cases in Indonesia reached 11,192, with a death rate of 10% of patients infected with the corona virus. Furthermore, in some countries this figure has generally decreased, but in Indonesia it is still increasing.

The fear of the people in South Lampung about the disaster that has and has always threatened the presence of Mount Anak Krakatau increased when the corona pandemic (Covid-19) also emerged. The virus that has spread throughout the world is highly destructive. People understand that in addition to the many physical disturbances, the worst effect of this virus is death that comes quickly. Basically, all communities in disaster areas must understand both in terms of knowledge and skills regarding matters related to disasters and how they will eventually become survivors when the disaster occurs. Help for survivors is done in terms of physical, psychological, and spiritual.

In disasters, the concept of Psychological First Aid (PFA) is known, which can be analogous to the concept of Physical First Aid (First Aid in Accidents/P3K). The main goal of PFA is to reduce and prevent the emergence of a worse psychological impact from a disaster or other difficult situation, as well as to strengthen the psychological recovery process. The basic principles of PFA are to provide assistance as soon as possible directly to people who need support, provide accurate and logical information about the situation, be honest about the condition of survivors, provide emotional support for people who need support, focus on the abilities of people who need support, provide non-discriminatory attention to all.

Considering that professionals such as counselors, psychologists, or other clinicians such as doctors are not always able to handle the effects of disasters, it is the local community who are obliged to know and be skilled in conducting PFA. The community must be able to carry out PFA to people around who need support. Everyone who needs support from various stages of development of children, adolescents, adults, the elderly, and family members.

What is noted in the implementation of the PFA is that good intentions alone are not enough without the support of knowledge and skills on disaster situations that occur as well as skills in helping/assisting. So it is important for PFA personnel to understand how to help the psychological condition of survivors as well as help themselves. So it is important to give the PFA team the ability to be able to encourage people who need support to be involved in the recovery process.

Joshi (2014) examines that teachers' disaster knowledge in India are not sufficient, it can be seen by the identification of knowledge about disaster by 47% and skills about disaster by 53% of the population studied, as well as in Indonesia. This can be seen from data in the mass media which shows that even though there is a pandemic disaster, there are still many people who do not follow health protocols. For example, if the government imposes restrictions on social and physical interaction, but there are still many who are busy shopping, or carrying out worship at places of worship. Thus, the number of patients with corona disease has increased, not decreased and is under control.

Foote (2015) concludes from several studies related to the disaster that there are many aspects that affect student-teacher relationships that will increase students' emotional stability in schools. This means that teachers have an important role in providing understanding and skills related to disasters to students. Some related aspects include including and involving student development factors, peer-based interventions, and matters related to disasters in the learning curriculum provided by the teacher. If

the emotional bond between the teacher and students is strong, the teacher will find it easier to manage and treat the trauma experienced by students during a disaster.

Disaster preparedness actually focuses on preparedness and prevention, so it's not just when a disaster has occurred. In this phase, knowledge and skills are needed related to understanding that focuses on knowledge to survive as a survivor and to know the abilities possessed by each individual to deal with the disaster that will occur. Especially if the area you live in is always at high risk for disaster. Such as the South Lampung area which is opposite and adjacent to Mount Anak Krakatau, and is increasing with the corona pandemic disaster.

Based on the problems mentioned above, the authors conducted a study "Analysis of Knowledge and Skills of Disaster Preparedness in Middle and High School Teachers in South Lampung".

LITERATURE REVIEW

A. The Need For Identification Of Disaster Knowledge And Skills In The School Environment

Evaluation of student needs in schools represents a core area of stability when a disaster strikes in an area and is an important aspect of a community or society. The results of several studies show that students will react differently when experiencing disaster trauma. This is influenced by the family support he gets, the death of someone close to him, or diversion during a disaster.

This shows the importance of teachers in helping students when experiencing stress or trauma due to disasters by various ways of coping for students. The teacher is the best figure in providing assessments and becomes a supporting environmental factor for students when experiencing a disaster. Of course beyond the support and assistance from the family. Therefore, it is important for teachers to have a good understanding and adequate skills related to reactions and behavior in dealing with disasters ([Johnson et al, 2014](#)).

Students will develop a variety of contexts in dealing with and overcoming the trauma that comes from the disaster they experience. The context in the home, school, and community related to students was found ([Bronfenbrenner, 2005](#)) as an ecological model (ecological model). From this comprehensive model from various contexts, students can be invited to be more effective when experiencing trauma in dealing with or experiencing disasters.

B. Class-Based Intervention in Disaster

Class-based interventions are interventions that are considered good and supportive in disaster recovery, because of the strong bond between teachers and students ([Kilmer et al., 2010](#)) With the knowledge and skills that teachers have, they will be able to provide support to students who have problems after a disaster occurs. Ability in resilience will help students in coping with stress due to the disaster they have experienced so that they can immediately live normally with the help of teachers who understand and are skilled in overcoming problems that arise during disasters ([Wolmer et al., 2011](#)).

Meanwhile [Dermott \(2014\)](#) explained that in Australia, the research results of The National Strategy for Disaster Resilience (Council of Australian Governments) made the government focus on the disaster curriculum by mapping the knowledge that must be mastered; which includes: functioning well under pressure, successful adaptation, self-reliance, and social capacity. From this it can be seen that it is important to include

knowledge and skills to cope with stress, in this case trauma caused by a disaster, as well as psychological support first in order to be able to adapt to the problems faced in the disaster learning curriculum in schools.

Students who experience stress or trauma during a disaster will struggle to stay involved and benefit from the school they are in. The emergency education curriculum must focus on providing and ensuring the implementation of a psychological support curriculum for children as students at the school (INEE, 2017). As a response in the recovery period, the curriculum, both formal and non-formal, should involve social and emotional learning. This must include gaining the values, attitudes, abilities, knowledge, and skills that are important to become effective learners, to maintain and manage psychological well-being, and to cope with the challenges that arise next to students. Curriculum and education certainty are very sensitive and inclusive, because they must involve language, culture, religion, from and by teachers as well.

C. Implications of Disaster Knowledge and Skills on School Teachers

Shah et al. (2018) explain that teachers must have skills in strengthening children's resilience as students in dealing with stresses such as disaster trauma. For this reason, the curriculum and pedagogy must focus on the development of the behavior and affection of students who need to be strengthened.

INEE (2017) explained that it is important for students to gain psychological well-being, by providing activities that can help reduce or prevent risks to them and the surrounding environment. Ways that can be done are: providing adequate resources for learning, both by counselors and teachers, to support the identification of trauma and stress symptoms. Including providing appropriate action for him. There are some educational personnel who are inadequate in learning in disaster crisis situations. So it takes the recruitment of volunteer teachers to fill the vacancy in the position of teachers who understand disaster. Support, training, and incentives are needed for teachers who are adequate or understand this disaster. And this should be provided by the education office or the ministry of education, as well as education officials in the disaster area. INEE also explained the need for certainty for teachers to understand and be skilled in recognizing trauma and supporting psychological well-being or overcoming trauma. Efforts that must be made by teachers include knowing the techniques used to help students manage trauma and stress to support their psychological well-being. The use of teachers, social workers, and counselors to identify the psychological needs of students. They can also make connections between the school and the surrounding environment to monitor psychological needs and provide psychological support for students. The curriculum that provides this must involve effective psychological support practices as well as emotional and social learning. This can be done through child-friendly experiential learning activities, such as with sports, art, drama, music, or stories.

METHODS

The research method used in this study is a descriptive qualitative approach which aims to identify the knowledge and skills of disaster preparedness for teachers in South Lampung. Tuohy et al. (2014) showed that research with a qualitative approach can contribute to understanding the effects of disaster awareness and thereby add information to make programs related to prevention and social policy in disaster areas.

In the initial research for this initial data collection, the samples were teachers in junior and senior high schools which were junior and senior high schools in South Lampung which were carried out by random purposive sampling. A total of four junior high and 3 high school and 1 vocational high school with a total of 119 junior high school teachers and 153 high school teachers became the research sample on the understanding and skills of junior and senior high school teachers related to psychological support for victims or students from disaster areas.

Data Collection Methods and Instruments

The data collection technique used in this study was using an open questionnaire to identify knowledge and skills of disaster preparedness or Psychological First Aid (PFA) for teachers in South Lampung. The questionnaire given was based on the disaster emergency curriculum grid set by [INEE \(2017\)](#). PFA itself is one of the many forms of intervention that can and is commonly used to handle crisis and disaster situations [2]. PFA is designed with the aim of having PFA, namely reducing and preventing the psychological impact of disasters and trauma in human life.

The assessment is done by assigning a number between 1 (not appropriate), 2 (less appropriate), 3 (appropriate), to 4 (very appropriate). The V score ranges from 0 to 1.00. The closer to 1.00 the calculation with the Aiken's V formula is interpreted to have high validity. If the results of the calculation using the Aiken's V formula, the value of V 0.66 includes a high coefficient. Based on the results of expert judgments conducted by psychologists and counselors, the Aiken's V content validity coefficient of the 18 items in this instrument is 11 statement items with a range of 0.80 and 7 statement items with a range of 1.00. Thus, the 18 items of this instrument are said to be valid instruments.

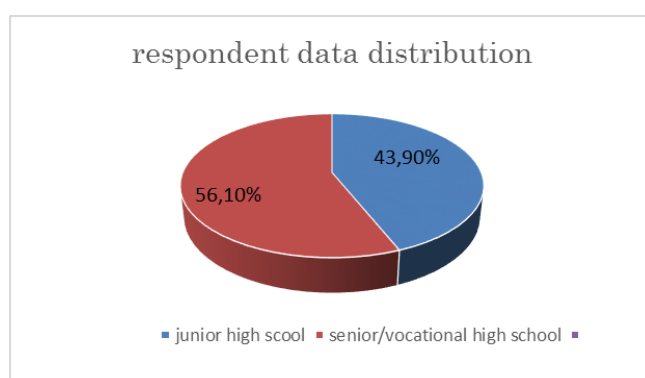
Based on the results of the reliability test data using the Alpha Cronbach method that has been carried out through the SPSS 16.0 for Windows application, the reliability calculation is 0.960.

Descriptive analysis in this study provides an overview or data description of the level of knowledge and skills of disaster preparedness for junior high and high school teachers. Categorization of the level of knowledge and skills of disaster preparedness is done by dividing the research sample into low, medium, and high categorizations. From a sample of 273 junior and senior high school teachers in South Lampung, there were 171 teachers with a high level of knowledge and skills category, 97 teachers included in the medium category disaster preparedness knowledge and skills, and 5 teachers included in the low category disaster preparedness knowledge and skills. Thus, there are 62.63% who have a high level of disaster knowledge and skills, 35.53% have a moderate level of disaster knowledge and skills, and 1.84% have a low level of disaster knowledge and skills.

RESULTS

A. Results of Data Analysis Aspects of Psychological Support

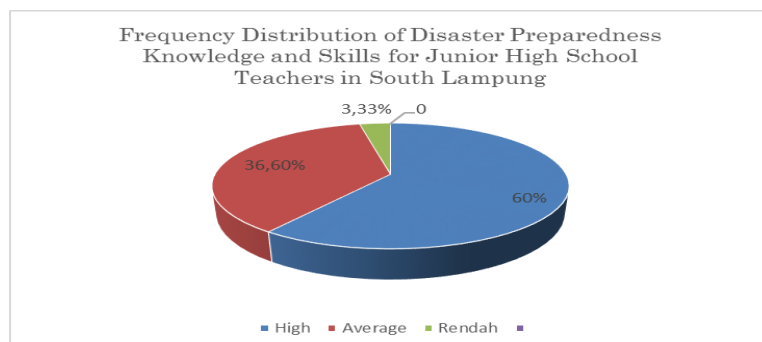
Descriptive statistics are intended to provide an overview or description of data that can be shown through several measures, namely the mean, maximum, minimum, standard deviation and variance. This study used junior and senior high school teachers in South Lampung as the research sample. Based on data retrieval by distributing questionnaires in the form of online, namely by Google Form or offline by visiting the school where the teacher is on duty. Researchers obtained 273 respondents consisting of 120 teachers who served in junior high school in South Lampung, and 153 teachers who served in senior and vocational high school in South Lampung. Thus, the distribution of the data is 43.9% from junior high school teachers and 56.1% from senior and vocational high school teachers. The following is a picture of the distribution of respondents' data.



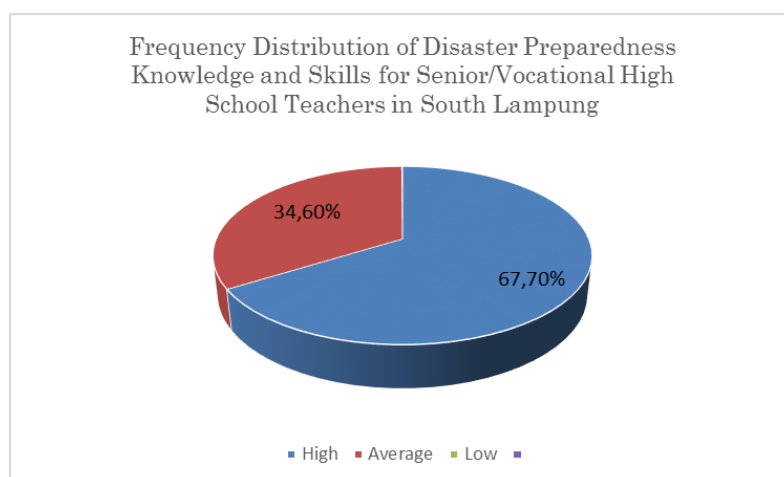
Picture 4. 1. Distribution of respondent data

B. *Distribution of respondent data*

The majority of the knowledge and skills of disaster preparedness for junior high school teachers in South Lampung are in the high category, namely 60%, the medium category is 36.6%, and the low category is 3.33%. Meanwhile, for senior high school teacher respondents in South Lampung, data on the level of knowledge and skills of disaster preparedness for high school teachers in South Lampung were in the high category, namely 64.7%, the medium category was 34.6%, and the low category was 0.07%. The results above can be illustrated in the following:



Picture 4.2 Frequency Distribution of Disaster Preparedness Knowledge and Skills for Middle School Teachers in South Lampung



Picture 4.3. Frequency Distribution of Disaster Preparedness Knowledge and Skills for Middle School Teachers in Lampung.

The results obtained from calculating the percentage or frequency distribution of respondent data indicate that teachers already have a good understanding of disaster preparedness knowledge and skills. This applies to both junior and senior high school teachers in South Lampung. This means that both junior and senior high school teachers in South Lampung already have adequate scientific knowledge to be used in disaster mitigation actions if it occurs in the area where they teach. Based on the indicators listed in the questionnaire, thus if facing a disaster in the area where he teaches, the teacher will later play a role as expected, which will be able to build good relationships and protect/care for students, can provide physical and emotional support, can provide information needed by students, can provide or find the help students need, can connect students with problems with the assistance provided by family, friends, and can support participants to receive systematic support, and of course can provide learning or mentoring psychological issues related to stress and post-disaster recovery.

DISCUSSION

For The aspect of knowledge about disasters in disaster-prone areas is an absolute or indispensable thing. This certainly cannot be separated from the impact of this knowledge on other aspects, such as in disaster mitigation planning, as well as in reducing losses both physically, economically, socially, and psychologically. It's no wonder that education about disaster for every individual, especially those living in disaster-prone areas like Indonesia, especially South Lampung, is a must. Understanding of disaster mitigation will save or at least minimize casualties or economic-social losses caused by disasters. The efforts to disseminate effective disaster management and mitigation education were provided through schools.

The high level of knowledge about disaster among teacher respondents in South Lampung states that the experience of experiencing a disaster will result in proper preparedness. History proves that in South Lampung there have been natural disasters such as tsunamis, earthquakes, floods/robes, or social disasters such as wars between villages. This is certainly in line in education and life experiences experienced by individuals will be the most influential factors in shaping the knowledge of the individual concerned. Knowledge,

attitudes and skills about disaster management appear to have occurred in all junior and senior high school teachers in South Lampung.

Good disaster mitigation will later require community awareness, knowledge, and readiness to contribute to education as one of the mitigation and disaster strategies. This is in accordance with the task of teachers, where they become central figures in the school community. So teachers are required to have knowledge and care or care for students, including disaster management while they are at school. Teachers are also required to act appropriately in accordance with the guidelines in the PFA. So it is hoped that this knowledge will reduce the risk of disaster if it occurs in the school environment.

This research is stated that the role of teachers in times of disaster is to be able to provide PFA assistance in the lives of students in disaster areas. This is related to the teacher's role as the responsible party in the education system, namely as the main person in charge of the curriculum and the ability of disaster area teachers. The ability in disaster mitigation management for teachers in schools means that students and the community in schools will be convinced that teachers will be able to understand, anticipate, and/or find solutions or assistance for students who experience disasters. If there is an unexpected disaster that happens when the children are still in school, the teacher is able to assist students in managing their social and emotional problems, which are related to the disaster they experienced (INEE, 2017).

CONCLUSION

The role of the teacher when a disaster occurs is to be able to provide assistance in understanding the stress or crisis that is being experienced by students. With an adequate level of disaster understanding among teachers in South Lampung, we are optimistic that teachers have the competence to help overcome traumatic stress from the education office. This is in line with the concept of the teacher as a figure who plays a large role in the lives of students. Teachers' skills in assisting the development of children's developmental problems, including overcoming emotional problems, including trauma, will be helped by the teacher's understanding of PFA in the event of a disaster.

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