



Teachers Knowledge about Disaster Preparedness: A Case Studies in Disaster Risk area

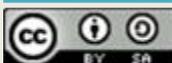
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Abstract

Knowledge of disaster preparedness is become one of the most important factors that must be owned by all residents living in disaster risk areas. This study was conducted to describe teacher knowledge about disaster preparedness in SMKN 1 Kalianda, South Lampung. This study used descriptive quantitative study with data analysis techniques using descriptive percentage analysis. The technique used in data collection was questionnaire. The results from this research are 88.46% of respondents have high knowledge of disaster preparedness, 11.54% are in medium level also none are in low level. This result showed that teachers in SMKN 1 Kalianda have understood the concept of disaster preparedness and knows what to do when a disaster happen. Teachers' knowledge about preparedness is supported by some supporting factors, such as school position, teacher awareness, experience, and socialization that have been provided by disaster institutions. In addition, there are differences in knowledge levels between female teachers and male teachers caused by differences in the number of female and male teacher respondents, empathy levels and resilience.

Keywords: disaster preparedness, disaster risk area

Open Access



Received : xx-xx-xxxx. Published : xxxx-xxxx

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Website: <https://e-jurnal.fkip.unila.ac.id/index.php/JCGC>

INTRODUCTION

Disasters are divided into two types, namely non-natural disasters and natural disasters. Non-natural disasters themselves are disasters caused by non-natural factors, whereas natural disasters are disasters caused by natural factors. Natural disasters are one of the things that often occur in the country of Indonesia, this is caused by the geographical point of Indonesia located between two technonic plates of the world so that indonesia becomes one of the countries in the world that is prone to natural disasters, such as volcanoes, earthquakes, erupting mountains, tsunamis, and etc. One of the areas in Indonesia that is prone to natural disasters is Lampung province, therefore it is important for people who are in disaster-prone areas, especially for the people of Kalianda, South Lampung to have knowledge of disaster readiness with the aim of minimizing the negative impact caused by disaster events that come unexpectedly, both in terms of physical and psychological and spiritual.

Knowledge related to disaster preparedness that should be known and understood by the community of disaster-risk areas, including teachers in schools, namely related to Psychological First Aid (PFA). PFA has a basic principle that can provide direct assistance to individuals in need immediately, provide accurate and logical information about existing situations to be honest about the condition of survivors, provide emotional support for people in need, and provide non-discriminatory attention to all.

According to Winurini (2014) PFA can be done by mental health practitioners or professionals and the community, but because the professionals are limited, then the surrounding community is another option to do PFA including teachers, especially Foote (2015) said that various aspects that contribute to the relationship between students and teachers that will improve the emotional stability of students in school. This means that teachers have an important role in providing knowledge or understanding and skills about disasters to students.

There are many study have been discussed about disaster preparedness such as Analysis of Disaster Preparedness Knowledge and Skill Among Teachers at Middle School and High School, South Lampung (Mayasari, S., & Utaminingsih, D., 2022), Tsunami Preparedness Analysis for the Community of Legundi Island-Lampung (Achiari, H., & Gelfi, M., 2020), Disaster Preparedness Analysis on Small Island as a Tourist Destination (Case Study: Pahawang Island, Lampung Indonesia) (Persada, C., & Rusmiati, F., 2021), Study on community capacity of south lampung in dealing with disaster (Eridiana, 2021). The previous study showed that there were no studies discussed about teacher preparedness in SMK. As we know that, the curriculum used in SMK is different with curriculum used in SMA or SMP. Therefore, based on the problem and finding above, it is important to describe teacher knowledge about disaster preparedness in SMKN 1 Kalianda, South Lampung.

LITERATURE REVIEW

As is known, knowledge about disasters is important for the people of disaster-prone areas. According to Pembriati & Zohrian (2013) disaster knowledge is an ability to remember events or sequences that can threaten and can disrupt people's lives and livelihoods caused by natural factors and non-natural factors and can then cause fatalities, environmental damage, property losses, and psychological impacts.

According to Suwaryo & Yuwono (2017) there are several things that can affect a person's knowledge, namely age and education. Age can affect a person's knowledge, this is because the capture and mindset of humans is influenced by the age of each individual, where the more age it will develop also the mindset that then makes the level of knowledge obtained they are higher. In addition to age, education also affects the level of knowledge of individuals because someone who has a higher education will have a high level of reasoning so that it will have an impact on the level of knowledge possessed. Therefore it can be known that the ability of the individual in understanding things related and disaster events is influenced by the age and level of education of the individual.

One of the knowledge to prepare our self to face of events disaster is PFA, it is important for the community including teachers who are in disaster prone locations to have an understanding of PFA. Ayub, et al (2020) said that a teacher who has good knowledge and experience will form a good and appropriate attitude in the face of a disaster. This will certainly have a good impact on school residents in the event of an unexpected disaster, especially students who are in disaster-prone schools do need education and educators who can help them in increasing disaster preparedness knowledge.

To increase effectiveness in increasing knowledge related to disaster preparedness, the education sector can form a disaster curriculum that suits the needs. INEE (2017) mentioned that in the emergency curriculum has a focus on providing psychological support for students in the school, as well as involving social and emotional learning, then educational institutions can cooperate with other supporting institutions, such as BNPB and others.

METHODS

This study was a descriptive quantitative type with data analysis techniques used descriptive statistics. The sample was 26 teachers of SMKN 1 Kalianda which was chosen by simple random sampling techniques. The instrument used is a questionnaire adopted from the previous researcher Risqullah Chikita Ayori A. (2020), and was made based on the steps in doing PFA outlined by Levers (2012). Table 1 shows the categorization of each respondent based on standard deviation.

Table 1. Category of Standard Deviation

Score	Category
75%-100%	High
50% - 74%	Medium
0%-49%	Low

Table 2. Description of Descriptor

Descriptor ' code	Description
1	provide direct care
2	identify people with high risk
3	compose follow-ups

The stage for collecting data in this study is depicted in Figure 1. The first step in this study was distributing questionnaires to teachers consisting of 16 questions. Furthermore, the results of the questionnaire were analyzed to calculate the percentage of achievement indicators by each teacher. After obtaining the percentage of teacher achievement, categorization is carried out on each predictor. The predictor code is presented in table 2. Furthermore, the category data is used as the basis for taking conclusions.

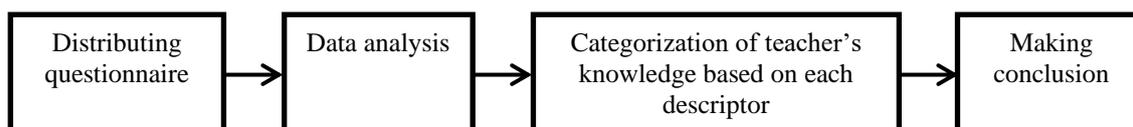


Figure 1. Study Implementation stage

RESULTS AND DISCUSSION

After distributing a questionnaire containing 18 statement items to 26 respondents in SMKN 1 Kalianda, researchers obtained results such as the table 3.

Judging from these data, it can be said that respondents who score in the range of 75%-100% fall into the high category, respondents with a score range of 50%-74% fall into the moderate category, and respondents with a score range of 0%-49% fall into the low category. Looking at the results of the percentage score analysis that has been obtained by each respondent presented in table 4. Based on data in table 4, it can be said that respondents who score in the range of 75%-100% fall into the high category, respondents with a score range of 50%-74% fall into the moderate category, and respondents with a score range of 0%-49% fall into the low category. Looking at the results of the percentage score analysis that has been obtained by each respondent presented in table 4.

Table 3. Respondent Percentage Score

No.	Name (Initials)	Gender	Teacher	Age	Score	Achievement Score Percentage (%)
1.	IRA	F	IPA	27	57	79,16%
2.	LFM	F	2D&3D Animation	27	57	79,16%
3.	M	M	Accountancy	50	51	70,83%
4.	NPDY	F	English	36	54	75%
5.	IF	F	Economic education	22	57	79,16%
6.	AJB	F	Multimedia	32	59	81,94%
7.	HS	M	Lampung Language	43	56	77,78%
8.	H.M	M	Accountancy	59	67	93,05%
9.	KL	F	Guidance and Counseling	25.	56	77,78%
10.	Ma	F	Productive Marketing	45	54	75%
11.	NS	F	Indonesian	35	67	93,05%
12.	CC	F	Physics	25	67	93,05%
13.	ET	F	Productive Marketing	51	54	75%
14.	S	F	Accountancy	56	70	97,22%
15.	Sr	F	Productive Marketing	57	54	75%
16.	EK	F	Islamic Education	52	57	79,16%
17.	LA	F	Math	27	54	75%
18.	IA	F	Guidance and Counseling	40	55	76,38%
19.	AV	F	Indonesian	41	56	77,78%
20.	LS	F	Accountancy	24	56	77,78%
21.	KPC	F	Indonesian	24	70	97,22%
22.	AP	M	Productive Travel Business	24	70	97,22%
23.	AM	F	Accountancy	27	46	63,89%
24.	A	M	Lampung Language	42.	60	83,33%
25.	HN	F	Lampung Language	40	58	80,55%
26.	HAA	F	Correspondence	28	50	69,44%

Table 4. Respondent Category Distribution

Range Achievement Score	Frequency	Percentage (%)	Category
75%-100%	23	88,46%	High
50% - 74%	3	11,54%	Medium
0%-49%	0	0%	Low

Based on the table above, it is known that there are 23 respondents or if percentageed to 88.46% of 100% of respondents fall into the high category, 3 respondents or 11.54% fall into the moderate category, while for the low category amounted to 0 or in other words no respondents fall into that category. Then, the researchers elaborated again the results obtained by respondents based on three descriptors forming the instrument, where the three descriptors are provide direct care (descriptor 1), identify people with high risk (descriptor 2), and compose follow-ups (descriptor 3). Results obtained based on the three descriptors can be seen in the figure 2.

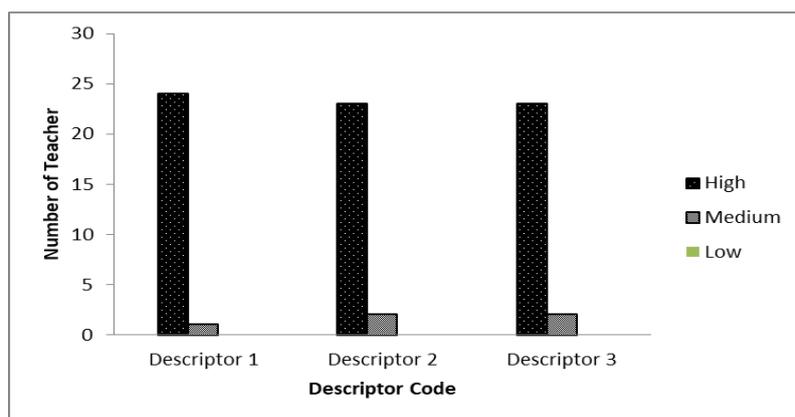


Figure 2. Distribution Number of Teacher Based on Descriptors

After knowing the distribution of knowledge owned by teachers based on descriptors as described above, then the researchers separated the results obtained by the respondent based on each gender, and can be seen in the Table 5.

Table 5. Difference in Knowledge of Female and Male Teachers Based on Descriptors

Descriptor	Number of Female Teachers	Number of Male Teachers	Category
Provide Direct Care	19 people	5 people	High
	2 people	0	Medium
	0	0	Low
Identify people at high risk	19 people	4 people	High
	2 people	1 people	Medium
	0	0	Low
Compose a Follow Up	19 people	4 people	High
	2 people	1 people	Medium
	0 people	0	Low

Based on the figures and tables above it can be known that in the knowledge of provide direct care to teachers, there are 24 respondents who are in the high category,

while 2 others are in the moderate category and 0 respondents who fall into the low category or if percentageed the number of respondents with high categories is 92.30%, 7.7% for the moderate category and 0% for the low category. For descriptors 2, namely knowledge of identifying people with high risk in teachers has 23 respondents with high categories (88.46%), 3 with moderate categories (11.54%), and 0 respondents who fall into the low category (0%). This has the same number as the third descriptor, namely the knowledge of composing follow-ups, where there are 23 respondents with high categories (88.46%), 3 with moderate categories (11.54%), and 0 for low categories (0%), in addition, teachers with female genders and teachers with male genders get different results on each descriptor.

After analyzing the data that has been spelled out in the above paragraphs, it can be known that the research respondents, namely teachers in SMKN 1 Kalianda already have good disaster preparedness knowledge. This is due to several factors, including the position of schools in disaster-prone areas that make the school motivated to anticipate by preparing knowledge about PFA, then in addition to the location that is a disaster-prone area, related teachers have also had awareness about the importance of preparing provisions in the face of disaster situations that if not prepared properly will cause various impacts that are not It is not desirable for victims or students who are in the area. This statement is reinforced by the results of the research of Ayub, et al. (2020) who said that the respondents of his research have preparedness and efforts to reduce disaster risk with a good category, which is something that is in line with their profession as teachers who must have efforts in preparing matters related to disasters.

Another supporting factor is the socialization provided by disaster-related institutions, such as BNPB. One of the study respondents with the initials "CC" said that the school where he worked, namely SMKN 1 Kalianda had several times received socializations about disasters. As well as research conducted by Sinaga (2019) with the results obtained said that disaster socialization activities carried out by an institution or other parties will have an influence on the level of public knowledge about disaster preparedness. In addition, disaster experience also contributes to the knowledge of teacher disaster readiness. Havwina, et al. (2016) who mentioned that experience will have a positive impact on individual preparedness, where the experience possessed by an individual will produce a learning that is with them preparing themselves to be able to face disaster events that are likely to occur. It proves that one of the factors that support the knowledge of disaster readiness in teachers in SMKN 1 Kalianda is their experience in passing disaster events.

The results of the study conducted at SMKN 1Kalianda are in line with the results of Widiastuti, et al (2020) conducted on middle and high school teachers with the resulting data that middle and high school teachers already have high knowledge and skills. Based on the high category obtained from the research at SMKN 1 Kalianda, it is expected that teachers there are able and ready in applying PFA if at any time there is a natural disaster in their area. Disaster readiness in this teacher will certainly also have an influence on the readiness of students in dealing with disaster situations. In addition, the results obtained also have similarities with the results of sabella research, et al (2021) which said that teachers at Sma Negeri 1 Palas already have a good level of preparedness knowledge about PFA.

The study also found that there was a difference in disaster preparedness knowledge between female teachers and male teachers in SMKN 1 Kalianda. This difference is due to the number of female teachers and the number of different male teachers in the school, in this case the teachers who make up the majority are teachers with the female gender.

Another factor that can make the level of categories of female teachers and male teachers different is the level of empathy they have, as is commonly known, female individuals have a higher level of empathy than male individuals. This statement is supported by the results of Nurdin & Fakhri (2020) research which said that there are differences in empathy levels between men and women, where women have a level of empathy that tends to be higher than the empathy level of male individuals.

The level of resilience possessed by teachers also contributes to their disaster readiness. Ghafur, et al. (2012) who said that the level of individual resilience will provide preparedness for the individual in the face of the disaster that will occur, where in this case the resilience possessed by individuals with the female sex can be better than men, the factor that underlies the level of resilience owned by the woman, namely the effort to heal themselves while helping others at critical times, The traits of women who are patient, diligent, diligent, serving, and others are able to provide services to the family sector and the public.

Hastuti (2016) also asserted that women have a fairly strategic role in preparing themselves for various disaster situations that can come at any time. Of course, this will have a good impact on the readiness of teachers in SMKN 1 Kalianda which has the majority of female teachers with a high level of disaster readiness knowledge category.

CONCLUSION

Based on the results and analysis that the author has described in the paragraphs above, it can be concluded that the majority of teachers in SMKN 1 Kalianda Lampung Selatan already have good disaster preparedness knowledge, where 88.46% of respondents fall into the high category and only 11.54% of respondents are in the moderate category and 0% of teachers fall into the low category. Good disaster readiness knowledge is supported by supporting factors, such as school position, teacher awareness, experience, and socialization that has been provided by disaster institutions. In addition, there are differences in knowledge levels between female teachers and male teachers caused by differences in the number of female and male teacher respondents, empathy levels and resilience.

ACKNOWLEDGMENT

The authors would like to thank and give respect to all participants who have been involved in this research process especially SMKN 1 Kalianda.

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