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**Disaster Knowledge Related to Disaster Management Among Teenagers**

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**Sindy Karinawati<sup>1(CA)</sup>, Agus Khoirul Anam<sup>2</sup>**<sup>1</sup> Department of Nursing, Poltekkes Kemenkes Malang<sup>2</sup> Department of Nursing, Poltekkes Kemenkes MalangCorrespondence author's email <sup>(CA)</sup>: [sindykarina2@gmail.com](mailto:sindykarina2@gmail.com)

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**ABSTRACT**

Damage to school infrastructure, systems, and human resources can affect the quality of education. The introduction and provision of knowledge on disaster risk reduction in the education sector need to be given to school residents in disaster-prone areas. The purpose of this research is to gain Knowledge of the Disaster Safe Education Unit based on 3 pillars of the National Disaster Management Agency in Disaster Prone Area II. Descriptive research design. The population of SMKN 1 Ngelegok residents who are in disaster-prone area II. A sample of 47 school residents with a stratified sampling technique. Data collection using a questionnaire. The results show that there are still some 41.6% of the school's residents have enough knowledge, and very few of the 6.3% of schoolchildren have less knowledge. This is due to the lack of information and existing school facilities are less supportive and need to improve the experience owned by school residents. Suggestions from the research are expected to provide training or counseling about disaster risk reduction in schools and improve the knowledge of school residents, especially teachers and administrative staff about DRR in schools to realize the School of Disaster Safe Education Unit with proper implementation and school residents can increase preparedness in facing disaster becomes better.

Keywords: Knowledge; Disaster Safe Education Unit; Countermeasures

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**INTRODUCTION**

Disasters that occur cause many schools to be damaged or destroyed, which can certainly endanger students and other school residents (1). Damage or destruction of school infrastructure, systems, and human resources can affect the quality of education. Therefore, it is very necessary to introduce and provide knowledge about disaster risk reduction in the education sector to school residents who are in disaster-prone areas.

Efforts to increase public knowledge, skills, and awareness in Disaster Risk Reduction have become the government's attention at every level, carried out through various activities including

training, counseling, simulations, seminars, and program development in the community. Based on a circular issued by the Ministry of National Education in 2010, in the formal education sector the mainstreaming of disaster risk in schools is followed up with teacher training activities, outreach, integration of disaster topics into infrastructure and infrastructure, as well as the School Disaster Preparedness (SSB) program (2)

SSB is an old term that has the same meaning as SPAB, namely a program that aims to save the lives of school residents, especially children, from the threat of disaster. However, the implementation of SPAB is still weak due to the support of government institutions at the level, and to date, the regions that have a high commitment to the implementation of SPAB can still be counted on the fingers of one hand, as well as limited training for teachers, school principals, and other educational staff to understand and implement the disaster safe school program (1)

Based on the results of a preliminary study with the BPBD of Blitar district on December 13, 2017, the district BPBD has made efforts to deal with the Kelud volcano eruption disaster including the formation of Disaster Resilient Villages in Modangan village and Semen village where teachers were participants, DRR outreach to teachers throughout Blitar District especially in the Kelud area, as well as outreach in 4 junior high schools in the Mount Kelud disaster-prone area which was given to all school students. One of them is SMPN 3 Nglegok, a school located in KRB II and very vulnerable to the impact of the eruption of Mount Kelud. However, to find out the extent to which disaster preparedness has been socialized in schools, BPBD has not been evaluated to date.

Based on the results of a preliminary study conducted at SMPN 3 Nglegok on November 4, 2017, that lack of exposure to disaster preparedness knowledge was proven by 6 out of 15 students knowing how to

## **METHODS**

This research uses a descriptive research design. The population in this study were residents of SMKN 1 Nglegok school which is in a disaster-prone area II, totaling 1873 people. With a sample according to the inclusion criteria set by the researcher, namely 186 school residents (Teachers, Administrative Staff, Students who take part in the PMR extracurricular), reduced to 25% of the previous sample. Anticipating volcanic eruptions, and 4 out of 6 teachers and school staff know about disaster preparedness. It was found that at SMPN 3 Nglegok the evacuation routes did not meet the regulatory requirements, as evidenced by the presence of evacuation routes that were less conspicuous or bright, faded colors made from printed and laminated paper, there was 1 evacuation route which was in a less strategic location, in the yard The back library has a damaged evacuation route sign, and there is no gathering point at the school, however, there is an emergency evacuation route sign in the front yard of the school towards the outside of the school.

Based on the description above, school residents need to know about disaster preparedness. For this reason, researchers are interested in researching the Knowledge Description of the Disaster Safe

Education Unit (SPAB) based on the 3 pillars of the National Disaster Management Agency in Disaster Prone Areas II SMKN 1 Nglegok. 47 school residents were obtained using a stratified sampling technique. Data collection was carried out at SMKN 1 Nglegok on 21-23 May 2018. Data analysis was descriptive with a percentage display.

### RESULT

In general, 52.1% of school residents have good knowledge about the Disaster Safe Education Unit based on the 3 pillars of the National Disaster Management Agency in Disaster Prone Areas II.

Table 4.1 Frequency distribution of knowledge description of the Disaster Safe Education Unit based on the 3 Pillars of the National Disaster Management Agency in Disaster Prone Areas II SMKN 1 Nglegok, May 2018 (n=48).

Knowledge	Frequency	Percentage (%)
Good	25	52,1
Enough	20	41,7
Not Enough	3	6,3%
Amount	48	100,0%

Based on Table 4.1, it can be seen that 52.1% (25 school residents) have good knowledge about the Disaster Safe Education Unit at school.

Table 4.2 Frequency distribution of knowledge description of the Disaster Safe Education Unit based on the 3 Pillars of the National Disaster Management Agency in Disaster Prone Areas II SMKN 1 Nglegok based on parameters, May 2018 (n = 48).

Disaster Safe Education Unit Pillar	Knowledge			Total
	Good	Enough	Not Enough	
School facilities are safe	24	24	0	48
Disaster management in schools	50	50	0	100
Disaster risk prevention and reduction education	22	19	7	48
	45,8	39,6	14,6	100
	41	5	2	48
	85,4	10,4	4,2	100

Based on table 4.2, shows that the school community's knowledge about the Disaster Safe Education Unit based on the 3 BNPB pillars shows that the percentage of knowledge in the good category is highest in the educational parameters of disaster prevention and risk reduction, namely 85.4% (41 respondents).

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Table 4.3 Cross-tabulation between age and knowledge of the Disaster Safe Education Unit based on the 3 BNPB pillars in KRB II, May 2018 (n=48).

Age \* Overview of SPAB Knowledge based on the 3 pillars of BNPB Crosstabulation

		Overview of SPAB Knowledge Based on 3 BNPB Pillars			Total	
		Good	Enough	Not Enough		
Age	13-15 years old	Count	1	0	0	1
		% of Total	2.1%	.0%	.0%	2.1%
	16-25 years old	Count	13	8	2	23
		% of Total	27.1%	16.7%	4.2%	47.9%
	25-40 years old	Count	5	5	1	11
		% of Total	10.4%	10.4%	2.1%	22.9%
	>41 years old	Count	6	7	0	13
		% of Total	12.5%	14.6%	.0%	27.1%
Total		Count	25	20	3	48
		% of Total	52.1%	41.7%	6.3%	100.0%

Based on table 4.3, shows that 52.1% of school residents have a good level of knowledge.

Table 4.4 Cross-tabulation between whether or not they have received PRB/SPAB socialization and knowledge, May 2018 (n=48).

Have received PRB/SPAB socialization \* Overview of SPAB Knowledge based on the 3 pillars of BNPB Crosstabulation

		Overview of SPAB Knowledge Based on 3 BNPB Pillars			Total	
		Good	Enough	Not Enough		
Have received PRB/SPAB socialization	Never	Count	4	4	0	8
		% of Total	8.3%	8.3%	.0%	16.7%
	Once	Count	21	16	3	40
		% of Total	43.8%	33.3%	6.3%	83.3%
Total		Count	25	20	3	48
		% of Total	52.1%	41.7%	6.3%	100.0%

Based on table 4.4, it was found that 52.1% had received socialization/information about Disaster Risk Reduction in schools/Disaster Safe Education Units.

Table 4.5 Cross-tabulation between whether or not they have received PRB/SPAB socialization and knowledge, May 2018 (n=48).

Amount of information obtained \* Overview of SPAB Knowledge based on the 3 pillars of BNPB  
Crosstabulation

		Overview of SPAB Knowledge Based on 3 BNPB Pillars			Total	
		Good	Enough	Not Enough		
A lot of information can be obtained	Never	Count	4	4	0	8
		% of Total	8.3%	8.3%	.0%	16.7%
	1 time	Count	10	4	0	14
		% of Total	20.8%	8.3%	.0%	29.2%
	2 times	Count	4	5	1	10
		% of Total	8.3%	10.4%	2.1%	20.8%
	3 times	Count	0	1	1	2
		% of Total	.0%	2.1%	2.1%	4.2%
>3 times	Count	7	6	1	14	
	% of Total	14.6%	12.5%	2.1%	29.2%	
<b>Total</b>		Count	25	20	3	48
		% of Total	52.1%	41.7%	6.3%	100.0%

Based on table 4.5, shows that 52.1% of school residents have good knowledge.

### DISCUSSION

Based on the data obtained, it was found that almost 98% of the school community (47 school residents) knew that implementing school policies or regulations such as making evacuation route signage was one of the implementations of disaster management in schools. However, there are still some school residents who do not know about disaster prevention and risk reduction education because there are still very few school residents, 17% (8 school residents) who do not know that disaster risk reduction education can be carried out in the form of independent and sustainable evacuation simulation practices. According to researchers, ' research results, a small number of school residents, namely 29.2% (14 students), know more about disaster prevention and risk reduction education because the school has PMR extracurricular activities, where every PMR member student has received disaster management training in This training activity provides materials about disaster risk reduction and disaster simulation so that this can increase students' knowledge about disaster risk reduction. Meanwhile, other school residents do not know about disaster prevention and risk reduction education due to a lack of exposure to information, as evidenced by a lack of support for disaster education in the school library and a lack of participation in training or counseling activities about Disaster Safe Education Units or disaster risk reduction in the school environment.

From the results of research on knowledge about the Disaster Safe Education Unit based on the 3 pillars of the National Disaster Management Agency, 52.1% of school residents (25 school residents) have good knowledge. In general, school residents know about the Disaster Safe Education Unit well, which is proven by almost all school residents, 85% (41 school residents) knowing that choosing a school location in an area that is not prone to disasters is something that can be done to support safe school facilities. By what was stated by (1), knowledge of safe school facilities is the first step to ensure that schools located in disaster risk areas are designed and built in a safe space so that their users (school residents) are protected. One of the activities in safe school facilities is the activity of placing schools in locations that are safe from disasters in the context of implementing (3).

Apart from that, school residents also know well that having an alarm or sign for evacuation is a facility that must be prepared by the school to create a Disaster Safe Education Unit school. This is by the theory of (1) which states that activities that can be carried out by schools in the context of implementing SPAB in the pillar of safe school facilities are the provision of supporting facilities including emergency response equipment in every room, first aid boxes, and early warning (alarms) or sign for evacuation. Knowledge of safe school facilities can be used to strengthen (retrofit) school buildings, so that the learning environment becomes a haven, and not a place that can endanger their lives (4). According to researchers, the school residents of SMKN 1 Nglegok know very well that evacuation routes are very important in school environments which are in disaster-prone areas II, where evacuation routes will help school residents save themselves when disasters occur, especially those in KRB II which are at risk of getting the impact of a volcanic eruption.

Another result obtained from this research is that 41.7% of school residents (20 school residents) have sufficient knowledge about the Disaster Safe Education Unit based on the 3 pillars of BNPB. This category was obtained because there was the highest number of incorrect questions at 40% (19 incorrect questions) in the parameters of disaster management in schools, the school community did not know that in forming SPAB, activities were needed to develop teaching and learning efforts in times of disasters. This is because the school community does not receive enough information/socialization related to disaster management at school, where the books in the school library do not support the activities of the Disaster Safe Education Unit. (5), it is revealed that if a school building is seriously damaged, cannot be accessed, or must be used as a temporary evacuation site, alternative locations or facilities may have to be arranged so that teaching and learning activities can continue.

Furthermore, the results of the cross-tabulation between the amount of information obtained and SPAB knowledge based on the 3 BNPB pillars showed that very few school residents, 12.5% (6 school residents) who received information >3 times had sufficient knowledge. This is not by the theory put forward by (6) that information is a factor that influences a person's knowledge, the more information a person obtains, the better the knowledge they have. According to researchers, if school residents receive

a lot of information but their knowledge still has insufficient categories, this could be due to a lack of support from the school community themselves in implementing the information they have obtained.

Based on the research results, it was found that very few families had insufficient knowledge, namely very few school residents, 6.7% (3 school residents), this category was obtained because 56% (27 school residents) did not know that regular monitoring of school building security was an activity included in the provision of safe school facilities, monitoring the security of school buildings is very important to ensure that the school buildings that are built are safe to be used as a place for school residents to carry out teaching and learning activities every day. According to (4) for physical development (rehabilitation and construction of new classrooms) in educational units that use social assistance funds from the APBN, by technical guidelines issued by the relevant directorate, educational units receiving social assistance funds must form a team of supervisors and development planners who determined through a Decree from the Principal of the School receiving social assistance based on recommendations or input from the local District/City Education Office. According to researchers, with such a provision, schools must carry out monitoring activities on school buildings, whether the building is safe for daily use and when a disaster occurs at any time.

Based on the explanation above, there is a correspondence between facts and theory that education and experience factors influence a person's knowledge.

### **CONCLUSION**

Based on the results of research regarding "Description of Knowledge of Disaster Safe Education Units Based on the 3 Pillars of the Disaster Management Agency for Disaster Prone Areas II SMKN 1 Nglegok" shows that some school residents have good knowledge. This is based on research results that 52.1% of school residents have good knowledge about the Disaster Safe Education Unit at school, 41.6% of school residents have sufficient knowledge, and very few 6.3% have poor knowledge about the Disaster Safe Education Unit based on 3 pillars of the National Disaster Management Agency.

This is influenced by safe school facilities in the category, namely good and adequate, where this is of course influenced by the information obtained, and the experiences of the school community are partly good. However, school residents still need to increase their understanding and knowledge in building disaster management in schools to maximize the steps towards becoming a SPAB school. The parameters of prevention and risk reduction education in schools, almost all school members have a good category in holding activities that support DRR education, however DRR education must continue to be improved to make it easier to implement school SPAB

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