

The Influence of Disaster Counseling with Animation Video on Preparednes Students in Elementary School in Palu

Imtihanah Amri¹, Ansariadi², Ridwan Amiruddin³, Sukri Palutturi⁴, Anwar Mallongi⁵,
Rosmala Nur⁶, Nur Endang Sari⁷

¹Student of Doctoral Program, Faculty of Public Health Hasanuddin University, Makassar, Indonesia, ²Associate Professor, Department of Environmental Health Faculty of Public Health Hasanuddin University, Makassar, Indonesia, ³Professor, Department of Epidemiology Faculty of Public Health Hasanuddin University, Makassar, Indonesia, ⁴Professor, Department of Health Policy and Administration Faculty of Public Health Hasanuddin University, Makassar, Indonesia, ⁵Associate Professor, Department of Environmental Health Faculty of Public Health Hasanuddin University, Makassar, Indonesia, ⁶Associate Professor, Department of Biostatistics, Faculty of Public Health Tadulako University, Palu, Indonesia, ⁷ Students of the Faculty of Medicine, University of Tadulako, Palu Indonesia

Abstract

Background: The Central Sulawesi region is one of the areas prone to earthquakes and tsunamis in Indonesia. The low level of knowledge of the community, especially children who are the age most vulnerable to the risk of victims in a disaster. The vulnerability of children to disasters is triggered by a limited understanding of the risks around them, which results in the absence of preparedness in the face of disasters. This study aims to know the influences of disaster counseling with animation video on preparedness students in elementary school in sigi district.

Methods: This research used a quasi-experimental with the pretest-posttest design. 40 respondents, grade IV and V student, were determined by the total quota sampling technique. Data was collected using questionnaires and observation sheets. Data analysis using t-dependent and will be presented in tabular form.

Results: Shows that the average value of respondents' knowledge before video playback (pre-test) is 83.12. Meanwhile, the average value after playing the video (post test) is equal to 92.62. This shows that an increase in the average value of respondents after the video playback. The results of the t-dependent test showed that the animation video method had a significant influence on improving preparedness ($p = 0,000$).

Conclusion: Shows that counseling with animation video method can have a greater influence on the increase in preparedness

Keywords: *Counseling, animation video, Preparedness*

Introduction

In tectonic terms, Indonesia's territory is at the confluence of three active large tectonic plates of the world, namely the Eurasian, Pacific and Indo-Australian

plates. The Central Sulawesi region is one of the earthquake prone areas in Indonesia, because this area is located close to the source of the earthquake which is on land and at sea.¹

Safer schools are needed to protect children's lives during disasters. The concept of school safety is not limited only to prevent the collapse of school buildings during disasters and the safety of teachers and students, but more broadly to achieve a greater goal, namely "disaster risk management", because children play

Presenting author:

Imtihanah Amri

E-mail: imtihanahamri@gmail.com

+6285396767406

the role of future generations. Something they have learned about safety today will be useful in developing a “community that is responsive to disaster risk” in the long run. Here is the importance of education about disasters in school safety^{2,3}.

Preparedness is all forms that are carried out to avoid the risk of a disaster that will occur, if a disaster occurs when and if the disaster is still a long time will occur, then preparedness to avoid risk is the best way. Preparedness is any activity prior to a disaster that aims to develop operational capacity and facilitate effective responses when a disaster occurs⁴⁻⁶

This research was conducted by utilizing animated video media that is in accordance with the characteristics of grade IV and V elementary school students, which have begun to understand the cumulative aspects of the material, have the ability to understand how to combine several classes of objects that vary in their level. Besides that students have been able to think systematically about concrete objects and events and students have achieved high objectivity because students have been fond of investigating, trying, and experimenting which are stimulated by probing drives and great curiosity.⁷

Based on the background described above, the researcher conducted a study entitled the effect of video media for earthquake disaster preparedness on the level of student preparedness in SD 2 Talise, Central Sulawesi.

Materials and Method

The research design used was quasi experimental (quasi-experimental) using pre and post test. This research was conducted at Talise Palu Elementary School. The respondents consisted of 40 students, determined by total sampling technique. Inclusion criteria in this study are: 1) Students in grades 4 and 5; 2) have never received a disaster alert counseling.

The extension instrument used to collect data in this study was in the form of animated video media about earthquake disaster preparedness as a learning medium and a questionnaire that had been tested for validity and reliability before to determine the level of respondent's knowledge about disaster preparedness.

The questionnaire will be tested on subjects that are not research samples but have characteristics that are almost the same as research samples that are students in grades IV and V Elementary Schools in Palu.

The time of the research is August 2019. The counseling group with audio-visual media will be given counseling by instructors who have been certified using a 30-minute animated video. Data collection was carried out before and after counseling was given. Data were collected using a questionnaire and observation sheet. Research on the level of preparedness is carried out by asking 20 questions to respondents with a value of 1 for each correct answer and 0 for incorrect or unknowable answers. The assessment based on the preparedness index value used based on Preparedness is grouped into four parameters namely knowledge and attitudes / Knowledge and Attitude (KA), emergency planning (EP), warning system / Warning System (WS) and resource mobilization⁸. The collected data was then analyzed using univariate analysis and bivariate analysis. Univariate analysis was used to determine the characteristics of the respondent's data (including age and sex) and the data of each variable, namely the level of preparedness in each group. Bivariate analysis used to determine differences in the level of preparedness before and after counseling was given to each group using the t-dependent test, the data obtained from subsequent studies will be presented in tabular form.

Written permission was obtained from the Research Ethics Commission of the Tadulako University Medical School. Each respondent is explained in advance about the research procedure to be carried out, and if agreed, the respondent completes the consent form to participate in the research, and begins to take part in the research activities.

Results

Data on the characteristics of respondents by age shown in table 1, shows that all respondents were in the same age group, namely elementary school age. Most respondents (55%) were 10 years old and most respondents were women (52.5%).

Table 1: Frequency distribution of respondent characteristics based on age and gender

| Characteristics | Frequency (n) | Percentage(%) |
|-----------------|---------------|---------------|
| Age | | |
| 10 year | 22 | 55 |
| 11 year | 18 | 45 |
| Gender | | |
| Male | 19 | 47,5 |
| Female | 21 | 52,5 |

Table 2: Distribution of Respondents by Level of Preparedness Before video playback

| Characteristics | Frequency (n) | Percentage(%) |
|---------------------|---------------|---------------|
| Sangat Siap(80-100) | 30 | 75 |
| Siap(65-79) | 7 | 17.5 |
| Hampir Siap(55-64) | 1 | 2.5 |
| Kurang Siap(40-54) | 1 | 2.5 |
| Belum Siap(< 40) | 1 | 2.5 |
| Total | 40 | 100 |

Table 2 shows that respondents who had the most prepared categories were 30 children (75%) before the video screening and the lowest preparedness in the categories of almost ready, less ready and not ready, each with 1 child (2.5%).

Table 3: Distribution of Respondents by Level of Preparedness After video playback

| Characteristics | Frequency (n) | Percentage(%) |
|----------------------|---------------|---------------|
| Very ready (80-100) | 38 | 95,0 |
| Ready (65-79) | 2 | 5,0 |
| Almost ready (55-64) | 0 | 0 |
| Less ready (40-54) | 0 | 0 |
| Not ready yet (< 40) | 0 | 0 |
| Total | 40 | 100 |

Table 3 shows that respondents who had the highest level of preparedness before the video screening were very ready to be 38 children (95%) and the lowest preparedness in the ready category was 2 students (5%).

Table 4: Effects of Disaster Preparedness Animated Video Screening on the level of disaster preparedness

| Variable | Min | Maks | Mean | SD | p |
|------------------------|-----|------|-------|--------|-------|
| Before Video Screening | 30 | 100 | 83,12 | 13,899 | 0,000 |
| After Video Screening | 65 | 100 | 92.62 | 8.085 | |

Based on the results of the data normality test, it is known that the research data do not meet the criteria for processing by using the T dependent test (parametric test). Therefore, data processing is done by using an alternative nonparametric test that is Wilcoxon test. The comparative distribution of respondents' pre-test and post-test scores and the effect of video playback are listed in Table 4

Discussion

Based on the characteristics of respondents, respondents are elementary school students in grades IV and V whose age range is between 8-12 years. According to Susanto the characteristics of development include developments in cognitive aspects, namely in the concrete operational stage (ages 7-11 years), at the stage These students have started to understand the cumulative aspects of the material, for example volume and amount, have the ability to understand how to combine several classes of objects that vary in their level. In addition, students are able to think systematically about objects and events that are concrete and formal operational stages (ages 11-15), at this stage students are already in their teens, the cognitive development of students at this stage already has the ability coordinate two kinds of cognitive abilities both simultaneously (simultaneously) and sequentially. So that in this study the learning method used video animation which of course can be well understood at the age of 8-12 years.

Based on the research results obtained, it is known that the average value of the respondents before the video screening (pre-test) was 83.12. Meanwhile, the average value after playing the video (post test) is equal to 92.62. This shows that an increase in the average value of respondents after the video playback.

After doing statistical tests using Wilcoxon test obtained p value of 0,000 ($p < 0.05$). The results of this test indicate that there are significant differences regarding the level of disaster preparedness before and after video playback. there is an influence of video animation media on earthquake disaster preparedness on the level of student preparedness at SDN 2 Talise Central Sulawesi.

These results are consistent with what was revealed by Agustiniingsih in an educational journal, that video media can be utilized in the learning process because it can effectively describe the material presented, especially material that is dynamic. (9) According to Munir's theory

the function of animated video can attract attention with the movement and sound in animated video barrel, simplify the appearance of presentations, facilitate the composition of presentations, make it easier to describe a material, to be able to explain something complicated with just pictures or words.

The results of this study are also the same as the research conducted by Wulandari, that there is an influence of the use of video media on the level of preparedness of SMA Negeri 1 Manantwarno students, where there is an increase in student preparedness in the face of an earthquake.

Based on the overall results of the study, it can be seen that the animation of video playback can help to increase one's knowledge significantly, so that this media can be used when providing earthquake disaster preparedness learning by paying attention to more interesting and not boring video quality and the time and environmental conditions when video playback. After the video screening, respondents have at least experienced an increase in earthquake preparedness in the very prepared category. Based on Wells knowledge about preparedness is an effort to reduce the risk and impact of disaster losses, that is knowledge of disasters, actions to prepare, support and rebuild communities after a disaster occurs. Knowledge of disasters is the main key in preparedness¹⁰.

Conclusion

Based on the results of research and discussion that has been described previously, we can get some conclusions as follows:

1. There is an increase in the level of preparedness in the category of very ready, where before giving counseling that is 75% to 95% after being given counseling with animated video media
2. There is an effect of counseling with earthquake disaster prepared video animation media on the level of student preparedness at SDN 2 Talise Central Sulawesi with a p value of 0,000 ($p < 0.05$).

Ethical Clearance- Taken from university Ethical committee

Source of Funding- Self

Conflict of Interest ; None

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