EFFECT OF EDUCATIONAL MEDIA PICTURE CARD ON KNOWLEDGE OF FIRE DISASTER RESPONSE IN SCHOOL-AGE CHILDREN

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ABSTRACT
Background: Every year cases of fire disasters have increased. Fire disasters can occur anywhere resulting in victims and loss of property. Fire disasters can occur in adults, the elderly and also children. Children are included in communities that are often at risk of the impact of fire disasters, because their skills and knowledge are still considered to be lacking which is the reason children become victims. Prevention efforts that can be done by providing education as early as possible to children about fire emergency response, one of the media that can be used for school-age children is media picture cards in the form of pictures and explanations that are easy for school-age children to understand and remember. Research Objectives: To determine the effect of educational media picture cards on knowledge of fire emergency response in school-age children. Research Method: Type of quantitative research with a Pre-Experimental approach using the One Group Pretest-Posttest Design. The sample involved 74 respondents by selecting the sample with the Total Sampling technique. The research instrument uses picture cards and knowledge questionnaire sheets about fire emergency response. Data analysis using the Wilcoxon statistical test. Results: The median value before being given education was 14.00 and after being given education it was 19.00 so that there was a significant difference between before and after education on picture card media on fire disaster emergency response knowledge obtained value (P Value = 0.001). Conclusion: There is an educational effect of picture card media on knowledge of fire emergency response in school-age children.

Keyword: Education, Picture Cards, Knowledge, Responsiveness, Fire Disaster Emergency.
INTRODUCTION

Disaster is a series of events or incidents that result in losses, which threaten people’s lives, disasters are unexpected events that can occur anywhere, can happen to adults, the elderly and also to children. Children often become victims of disasters because their skills and knowledge are still considered to be lacking. Disasters are caused by natural and non-natural factors (Setyaning, 2020).

Fire is a situation where a building in a place, such as a house/settlement, factory, market, building, etc., is burnt by a fire which causes casualties and also loss of property. Until now, fire disaster is a serious problem and has become a global concern. The report is based on statistical data from the International Association of Fire and Rescue Service (CTIF) in 2018 to 2019 fire incidents in the world with the highest total cases in 2018 with a total of 5.1 million cases and in 2019 fire incidents amounted to 3 million cases (Darea et al., 2021).

According to law number 24 of 2007 the causes of fires can occur from natural factors and non-natural factors. Natural factors can be due to lightning strikes, while non-natural factors are the result of human negligence, fires are most often caused by electric currents and gas stoves. The impact of the disaster resulted in disruption of biological, geographical, social, economic, political, cultural and technological characteristics (Aryono, 2016).

Cases of fire disasters do not only occur in residential buildings, but also occur in educational institutions such as schools which are at risk of fire hazard (Ayu & Ratriwardhani, 2021). The danger of fire in schools can result in various unwanted impacts, damage to buildings, burning of important documents and disruption of the learning process (Su Minta et al., 2020). So it is very important to provide knowledge as early as possible, regarding fire emergency response.

Emergency response to a fire disaster is a series of activities that are carried out as soon as possible when a fire disaster occurs, with the aim of dealing with the negative impacts arising from the disaster. Emergency response activities include rescue activities, as well as evacuating victims, property, meeting basic needs, protection, management of evacuation, rescue, and restoration of facilities and infrastructure (Asiri, 2020).

Knowledge really supports the role of science in determining human life, both individually and socially, meaning that by providing education as early as possible to children about disaster emergency response, it will help reduce victims due to disasters that greatly affect life (Suryani et al., 2019). Based on Government Regulation No. 21 of 2008, it is stated that early childhood is one of the majority of victims who cannot save themselves when a disaster occurs, due to ignorance and limited understanding that needs attention, so that children are not vulnerable to being at risk of being affected by a disaster.

Based on the results of NEPA 92A in 1996, fires often cause unwanted events, as one study wrote, around 50-80% of deaths occur due to inhaling smoke from fires (Nasrullah & Reza, 2020).

The results of the preliminary study through interviews with the principal and 4 teachers along with security officers at SDN 89 Palembang, said that there was no counseling regarding fire disaster education, interviews were also conducted with 10 grade 6 students, during the interview process there were 6 students
who knew about fire disasters and 4 students who did not know anything about fire disasters. SDN 89 is in a densely populated area which is prone to disasters. From the results of interviews with one of the residents, in 2018 there was a fire in the area around the school, the fire burned 3 houses, the cause of which was LPG gas cylinders. Around the area there are also keplang and cracker manufacturing factories which are prone to fires. Students who live in the surrounding area do not know how to prevent and respond to fire emergencies in the event of a fire.

Education regarding knowledge of fire disaster emergency response is very important and needs to be done for elementary school-age children, especially schools that are in densely populated areas that are prone to disasters. To provide experience and knowledge, and the growth of disaster response attitudes for school-age children. Learning activities through education are very helpful for self-protection in an emergency.

Educational media that can be used are picture card media, picture cards including visual media and picture cards including graphic media. The advantages of picture cards in their application are that they have various variations and sizes of practical teaching aids. Picture cards are an effective medium for elementary school children, delivering material in the form of images and explanations that are easy for school-age children to understand and remember (Jannah & Hasmawati, 2017). Providing education is an intervention carried out by nurses as educators to assist in increasing health knowledge, and symptoms of disease and even actions to be given, so that changes in behavior occur after health education is carried out (Mita et al., 2022).

In the research conducted by Jannah, the way to apply educational media with picture cards is by holding the arranged cards at chest level and facing the students in front, remove the cards one by one, give the cards that have been explained to the students. In this study education was given 4 times. The results of this study found that there was a significant influence through the media of picture cards (Jannah & Hasmawati, 2017).

Based on the explanation above, the researcher is interested in conducting research with the title "The Influence of Picture Card Educational Media on Fire Disaster Emergency Response Knowledge in School-Age Children" at SDN 89 Palembang.

MATERIAL AND METHODS

The research design used is quantitative by using a pre-experimental approach, namely by using the one group pre-test and post-test design approaches. The sample involved 74 respondents by selecting the sample with the Total Sampling technique. The instruments used are questionnaires and picture cards about fire emergency response. Bivariate analysis in this study used the normality test using the Kolmogorov-Sminorof because the respondents were more than 50 people, the results of the normality test obtained abnormal value results, a data transformation was carried out and the results obtained after the data transformation were not normal so that an alternative method was carried out in this study using the Wilcoxon test to find the effect of educational media with picture cards on knowledge of emergency response to fire disasters in school-age children.
RESULTS AND DISCUSSION

1. Analysis Univariate
   a. Characteristics of Respondents
      Distribution of Respondents by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frekuensi</th>
<th>Persentase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>39</td>
<td>52,7</td>
</tr>
<tr>
<td>Women</td>
<td>35</td>
<td>47,3</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>100</td>
</tr>
</tbody>
</table>

   Based on the table above, it is known that the majority of the sexes are male, namely (52.7%).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standar Deviasi</th>
<th>Min-Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>11.36</td>
<td>11.00</td>
<td>0,874</td>
<td>10-13</td>
</tr>
</tbody>
</table>

   Based on the table above, it can be seen that the 74 respondents, the mean age of the respondents was 11.36 years, the median age of the respondents was 11.00 years, with a minimum age of 10 years and a maximum of 13 years.

Wilcoxon Test

The results of the data normality test showed that the data were not normally distributed, so the Wilcoxon test was carried out to see the relationship between the two variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Min-Max</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Pretest</td>
<td>14.00</td>
<td>10-18</td>
<td>0.001</td>
</tr>
<tr>
<td>Knowledge Posttest</td>
<td>19.00</td>
<td>16-20</td>
<td></td>
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</tbody>
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   Based on the table above, the Wilcoxon test results obtained a median pretest knowledge value of 14.00 and a median posttest knowledge value of 19.00. With a difference of 5. The results of the Wilcoxon statistical test obtained a p value = 0.001 with a value of α = 0.05 (p<α) which means that there is a significant difference between knowledge before and after education using picture card media so that it can be said that there is an effect of education using picture card media on fire emergency response knowledge in school-age children.

DISCUSSION

Based on the results of research conducted using the Wilcoxon test, it obtained a significant p value of 0.001 which means that if the p value ≤ α value (0.05) it means that there is a difference in knowledge before and after being given education using picture cards on fire emergency response knowledge in class VI students at SD Negeri 89 Palembang.

A fire disaster is a situation where a building in a place, such as a house/settlement, factory, market, building, etc., is burnt by a fire which causes casualties and also loss of property (Darea et al., 2021). Knowledge of fire emergency response is a series of activities carried out immediately at the time of a fire disaster to deal with the adverse effects that have arisen, activities which include rescuing and evacuating victims, property, fulfillment of basic needs, protection, management, evacuation, rescue, and restoration of infrastructure and facilities (Suryani et al., 2019).
Knowledge really supports the role of science in determining human life, both individually and socially, meaning that by providing education as early as possible to children about fire emergency response, it will help reduced victims due to fire disasters which greatly affect life (Suryani et al., 2019).

Health education media is a tool used in displaying information messages to be conveyed to communicators. The purpose of health education media is so that the target can gain knowledge and be able to change the target's behavior to be more positive so that they gain self-concept and self-confidence to be used by themselves in improving their behavior in the future. In an effort to help and demonstrate the educational process, it is necessary to have media. Media can be seen to be very helpful to target students in receiving information based on the ability to capture the five senses (Wulandari & Woro, 2016). Health education media is divided into various types, one of which is flashcard media (Pragastiwi, 2019).

Picture card media is one of the visual media, namely media that can help and stimulate the senses of the eye (vision), the advantages of card media are durable, include many people, low cost, no need to use electricity can be carried everywhere, facilitate understanding, increase enthusiasm for learning with material that contains images, the benefits of images in visual media are to create attractiveness, make it easier to understand, clarify important parts and abbreviate a long description (Wulandari & Woro, 2016).

Providing picture card education can increase knowledge that is easy to understand because conveying information uses picture cards with writing and pictures that are interesting and easily understood by children so that they attract attention and create a sense of enthusiasm in the learning process by playing cards which reduces boredom in learning (Lara, 2020).

Knowledge has a meaning, namely a power in the form that is obtained from knowledge after the person has done remote sensing (Luthfi, 2021). Most of human knowledge is obtained through the eyes and ears, such as obtained from the media of information picture cards in the form of writing and information in the form of images that help stimulate sensing in the learning process (Pradana et al., 2021).

According to Notoatmodjo (2012) the human senses convey the most knowledge to the brain, approximately 75% to 87%, which is obtained and absorbed through the eyes and the other 13% to 25% is channeled through other senses.

Increased knowledge with picture card media can be given 2 times so that respondents can take advantage of almost all of their sensory organs. The more senses used, the clearer the information the respondents get and the more they remember it (Afifaturrohma & Purmasari, 2020). Short-term memory in the hoppocampus will be repeated and will then be stored in long-term memory (Pramesti, 2017). Memory will absorb approximately 1-2 seconds for everything seen and 3 seconds for everything heard (Baharudin & Wahyuni, 2015). According to Guyton & Hall Julianto & Etsem (2014) the short term memory process is stored the fastest, namely 5-10 minutes and the longest takes 1 hour.

From several previous studies that support the research conducted, that there is an influence of picture card media on students' knowledge, this is evidenced by the results of knowledge which

Several previous studies have shown that picture card games can be used as educational media as a form of health outreach to society, especially children. This research also proves the same thing and this media is a form of fun learning with the aim of improving students' life skills. This is reinforced by research results which prove that picture cards as learning media can make students feel happy and look enthusiastic in participating in the teaching and learning process which enriches students' vocabulary mastery (Hamer & Rohimah Jaya, 2018).

Based on research results from researchers and theory, researchers assume that there is an effect of health education using picture cards on knowledge of emergency response to fire disasters. This is evidenced by the respondent's knowledge experiencing a significant increase, as seen from the difference between the pretest and posttest average scores. Increased knowledge of using picture cards as media because picture cards contain information in the form of pictures and writing with lots of colors so that it will make the delivery of material more interesting and easy for respondents to remember. At the time of distribution of the picture cards the respondents were given one by one so that when giving the material the respondents were more focused and could also imagine and imagine what could be done.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion
Based on the results of research on the effect of picture card educational media on knowledge of fire emergency response in school-age children at SDN 89 Palembang, with a total of 74 respondents it can be concluded that there is an influence of picture card educational media on knowledge of emergency response to fire disaster in school-age children at SDN 89 Palembang with a p value of 0.001 <0.05.

Suggestion
It is hoped that future researchers can add simulations when playing picture cards so that the results of using picture cards are not only in the form of material as done by researchers.

REFERENCES
Hamer, W., & Rohimajaya, N. A. (2018). Using Flash Cards as Instructional Media to Enrich


