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The Effectiveness of Short Education Movie (SEM) Media In Wound Care Behavior Among School Age Children

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Abstract:

Tens of millions of children suffer injuries every year. Injuries to children are caused by a lack of knowledge or education of parents or the environment around the children and the children themselves regarding the prevention and treatment of wounds when an injury occurs. Wound care is very important so that wounds can heal quickly and avoid infection. Health education for children can have a positive impact, education can be done through interesting media, for example short educational films (SEM), because children tend to be more interested in learning through interesting media such as pictures, short films or games. This study aims to determine the effect of short educational film (SEM) media on wound care. The research design is a pre-experimental approach with a one group pretest and posttest design. The sampling technique that will be used is non-probability sampling with a sample size of 32 respondents. The instrument in this study used a questionnaire about wound care with 13 questions and used a video / Short Education Movie (SEM) about wound care management and short film about wound care. Data were analyzed using samples paired t test with a significance level of $\alpha = 0.05$. Statistical test results show that there is an influence of the use of short educational films on wound care behavior in school-aged children ($p = 0.000$). Providing health education through Short Education Movies (SEM) attracts students' focus more in paying attention to the material compared to simply providing health education through lectures.

Keywords: Wound Care, Behavior, School Age Children, Media, Short Educational Movies

Introduction

Children aged 5 to 14 years are developing gross motor skills and curiosity, which increases the risk of injury. Injuries in children are an increasing common health problem and require special care. Data from the World Health Organization (WHO) shows that among children aged 5 to 14 years there were around 230,000 deaths (Oktaviani and Feri, 2020).

Tens of millions of children suffer injuries every year (Riamah *et al.*, 2023). In 2018, the number of injuries in Indonesia was 9.2%, with the highest rate in ages 5–14 years at 12.1%. The most common injuries were abrasions or bruises 63.1%, sprains 36.2%, lacerations 21.4%, fractures 6.4%, and severed limbs 0.6% (Balitbangkes RI, 2018). School students are a group at high risk for emergency incidents, because there are many possibilities that can occur in this group. The majority of injuries to children are directly related to physical activity outside where 20% of injuries occur during school hours (Fatmawati and Vita Sari, 2023). Globally, injuries are the third most common cause of death in children and are a major problem (Rosenblum *et al.*, 2022). More than 660,000 children aged 0–14 years died from injuries in 2018. Unintentional injuries (road traffic, drowning, burns, falls and poisoning) account for the majority of these deaths (Parmar *et al.*, 2023). The highest prevalence of injury occurs in school children, namely 13% and in the age range 5-14 years. Indonesia itself is the fifth country with the highest accident rate (Paransi, Sarwan and Suranata, 2023). Injuries to children are caused by a lack of knowledge or education of parents or the environment around the children and the children themselves regarding the prevention and treatment of wounds when an injury occurs (Sananta, Julana and Siahaan, 2022). The research results show that elementary school students still have limited knowledge regarding wound care (Irma Mustika Sari and Erika Dewi Noorratri, 2023).

The process of treating wounds is by carrying out wound care which helps wound healing by cleaning, closing and bandaging the wound (Susanti and Putri, 2021). Wound care is very important so that wounds can heal quickly and avoid infection. However, there are still many school-aged children who do not understand how to care for wounds properly and correctly (Irma Mustika Sari *et al.*, 2023). The solution to increase children's knowledge about wound care is by providing education. Health education is a process of increasing children's ability to maintain and improve their own health. Health education for children can have a positive impact (Sananta, Julana and Siahaan, 2022). Educational methods can improve the ability to care for wounds (Irawan, Emilya. et al., 2023). Education can be done through interesting media, for example short

educational films (SEM), SEM is a short film which is a mass communication medium that can be shown with a duration of 1-30 minutes (Saputra, Hidayat and Jamil, 2023) with SEM media children tend to be more interested to learn through interesting media such as pictures, videos/short films, or games (Wahyuni, Murti and Asmoro, 2019). SEM media can further improve students' understanding (Başaran And Erol, 2024), besides that effective SEM education can be provided through videos (Verma, Sharma and Khapre, 2021).

Methodology

Type of Research

The research design is a pre-experimental approach with a one group pretest and posttest design.

Place and Time of Research

The research was conducted at Sukamakmur Elementary School, Bogor District, West Java in January-April 2024.

Population and Sample

The population in this study was class V school-aged children at Sukamakmur Elementary School, Bogor District. The sampling technique that will be used is non-probability sampling with a sample size of 32 respondents. The inclusion criteria in this study were: children aged 9-12 years, able to read and write, and willing to be respondents. The exclusion criteria in this study were students who did not attend the meeting scheduled by the researcher (permission and illness) and not willing to be a respondent.

Data Collection

The instrument in this study used a questionnaire about wound care with 13 questions with answer choices in the form of a Likert scale (always, often, sometimes, and never) and used a video / Short Education Movie (SEM) about wound care management and short film about wound care. Researchers provide and display videos using laptops, projectors and speakers. The contents of the video include: understanding wounds, types of wounds, understanding wound care, how to wash your hands properly, treating bruises, abrasions/torns and burns. Measurement of wound care behavior was carried out twice, namely before providing health education through short education films (SEM) about wound care and after providing health education through short education movie (SEM) media about wound care. health education through SEM media about wound care was

carried out during 3 times meetings in 1 week with a duration of 15 minutes at each meeting. The results of measuring wound care behavior are divided into 2, namely:

1. Positive, if the total value ≥ median
2. Negative, if the total value < median

Data Analysis and Processing

To analyze the difference between pretest and posttest wound care behavior, it was tested by using a paired sample t test, with a significance level of $p < 0.05$ and trust level 95 %.

Results

Table 1. Characteristic of Respondents (n=32)

No	Characteristic of respondents	Frequency	Percentage (%)
1	**Age**		
	11 years old	22	68.75
	12 years old	10	31.25
2	**Gender**		
	Male	13	40.62
	Female	19	59.38

Table 1 shows that most of the respondents were 11 years old as many as 22 respondents (68,75%) and most of them were female as many as 19 respondents (59.38%).

Table 2. Frequency Distribution Of Respondents' Wound Care Behavior Before And After Being Given Short Education Movie (SEM) Media About Wound Care (n=32)

Pretest	**No**	**Behavior**	**Frequency**	**Percentage (%)**
	1	Positive	17	53.1
	2	Negative	15	46.9
Posttest	**No**	**Behavior**	**N**	**%**
	1	Positive	23	71.9
	2	Negative	9	28.1

In Table 2, Frequency distribution of respondents' wound care behavior before and after being given Short Education Movie (SEM) media about wound care. Where the results of the pretest showed that out of 32 respondents there were 17 respondents (53.1%) who behaved positively and 15 respondents behaved negatively (46.9%), after being treated by showing a Short

Education Movie about wound care, a Posttest was carried out with the results namely, there were 23 respondents (71.9%) with positive results while 9 respondents (28.1%) behaved negatively.

Table 3. The influence of Short Education Movie (SEM) Media On Negative Wound Care Behaviour (n=32)

Post test – Pre Test	N	Mean Rank	P value
Negative	0	0.000	0.000
Positive	32	10.00	
Ties	0		

Table 3 shows the results of the non-parametric Wilcoxon signed rank test hypothesis. It can be concluded that in conditions of non-normal distribution, the non-parametric Wilcoxon signed rank test hypothesis test was carried out. The results of this test are indicated by a significance value (sig.) of 0.000. By referring to the criteria that if the P value (p value) ≤ 0.05, then the null hypothesis (Ho) can be rejected and the alternative hypothesis (Ha) is accepted. In this context, it is concluded that there is a significant impact from the use of Short Education Movie (SEM) media on wound care behavior in school-aged children.

Discussion

Learning using direct interaction such as video media can attract attention for a longer time so that students focus better. Learning using SEM increases creative thinking and strengthens visual understanding. Students' understanding of first aid can be an effort to prevent more serious injuries in the school environment. Health education about wound care is very important to increase students' knowledge and insight regarding first aid. The greater the person's level of knowledge, the easier it will be to receive information about objects or related knowledge. This knowledge can generally be obtained through information presented by parents, teachers and the media (Arikunto, 2019).

Educational videos must guarantee the credibility of the message given, health education videos provided by professional health workers are considered credible for health-related information (Herlianita *et al.*, 2020). From research conducted by Verma, et al (2021) that to disseminate knowledge, the focus of videos is about learning by doing, and this must be demonstrated accurately as in stage 1 of the research where videos with video characteristics such as visual attributes that attract the audience's attention, then a high-resolution video with a clear

background, this was proven by 15 out of 20 respondents who were very interested, so from observations it was found that these respondents watched the video by washing their hands to prevent Covid-19 (Verma, Sharma and Khapre, 2021).

The results of the research before being given health education using Short Education Movie (SEM) media showed that out of 32 respondents there were 17 students (53.1%) with positive behavior. This is in accordance with research conducted by Wahyuni et al (2019) which stated that not all respondents had a positive attitude in the pre-test. The respondent's behavior before being given health education using Short Education Movie (SEM) media showed positive results because the respondent had previously been taught by their parents (family) in wound care (Wahyuni, Murti and Asmoro, 2019). One of the factors that influences children's behavior is that it comes from the family. The home has a fundamental role in educating individuals throughout all stages of their life. Parents generally guide their children in health care practices, such as washing hands before and after eating, providing examples of good wound care and children following what their families have taught them (Benajiba *et al.*, 2023).

The results of the research after being given health education using Short Education Movie (SEM) media showed that out of 32 respondents, the distribution was 23 respondents (71.9%) with positive wound care behavior results. The results of this research are in line with the results of research carried out by Deva Dasilva, et al regarding health education through film media in an effort to increase knowledge, attitudes and self-efficacy in preventing premarital sex among teenagers which shows that the positive score between the pretest and posttest reached 177, indicating an increase in the assessment. respondents were positive before and after receiving health education through film media (Dasilva and Suwarni, 2023). The use of learning videos has a very significant effect on increasing respondents' knowledge (Irwan, 2020). Respondents prefer the use of videos in learning because it is easy to understand the learning content (Gorucu-coskuner, Atik and Taner, 2019). Respondents who watched the video got higher scores and had positive perceptions compared to respondents who did not watch the video (Razimi *et al.*, 2019). Research by Cheragi, et al., in 2021 showed that watching cartoons before starting the dressing change until the end of the wound dressing changing procedure can reduce pain in children aged 6-12 years, this means watching animated videos is very interesting for children (Cheraghi *et al.*, 2021). Providing information through mini-film media can be a stimulus to increase knowledge and change attitudes in children, providing health promotion through mini-film media can provide

information to respondents and become an important domain for the formation of behavior and self-awareness (Stinnett, Kim and Vann, 2020).

The results of bivariate analysis show that the significance value (sig.) is 0.000. When the p-value ≤ 0.05, the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. Thus, based on these results, there is a significant influence of SEM on wound care behavior in school-aged children. SEM has the potential to be effective in health education to improve knowledge and behavior in a variety of contexts, including care (Kurnia, Krisnana and Yulianti, 2020). Health education through Short Education Movie (SEM) media has the potential to influence factors that influence student behavior. Students can more easily engage and understand information through visual and auditory experiences presented in short film format. Thus, this media can be an effective tool in shaping or modifying behavior related to wound care in students. Respondents who received education via video had better compliance (Suhailah, Kusumaningrum and Nastiti, 2019). Health education via video can be a very effective learning tool, especially for processes that are difficult to visualize and for providing procedural material (Chen *et al.*, 2021). The application of educational videos has an effect on increasing patient understanding of health (Krumm *et al.,* 2020). Children's media with animated educational videos can have a positive influence on children's intellectual and emotional development, entertainment education with educational content has been proven to be effective in improving children's academic performance and social behavior, with even more impact if watched repeatedly (Matheson, Lewis-smith and Diedrichs, 2020). Providing education using cartoon video media can help children start learning from an early age, moving images, talking and colorful visuals make learning fun for children (Zheng, 2023).

Conclusions

Providing health education through Short Education Movies (SEM) can influence student behavior in treating wounds in school-aged children, because presenting material through film media is more interesting and increases students' focus in receiving the material compared to just through lectures. Health education through Short Education Movies (SEM) is really needed to increase school students' understanding so that it will have an impact on positive behavior in handling wound care independently and can prevent infection.

Conflict of Interest

The authors declare no conflicts of interest.

Author's Contribution:

All authors contributed to data collection, analysis, presentation, and discussion.

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