

Original Article

THE INFLUENCE OF HEALTH EDUCATION THROUGH LEAFLETS AND VIDEO MEDIA ON KNOWLEDGE ABOUT THE DANGERS OF SMOKING IN STUDENTS OF JUNIOR HIGH SCHOOL 1 PETERONGAN

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ABSTRACT

Background: Smoking is an unhealthy habit that can cause various diseases. Health education is essential to improve understanding of the dangers of smoking.

Objectives: This study aimed to evaluate the effect of health education through leaflets and video media on students' knowledge about the dangers of smoking at Junior High School 1 Peterongan.

Design: This research method uses quasi-experimental methods with one group, pretest-posttest. The population is 225 students of class VII of SMPN 1 Peterongan with a sample of 56 respondents using random sampling techniques. Data were taken using a knowledge questionnaire. Data were analyzed using the Wilcoxon Test, the Asymp. Sig. (2-tailed) value was obtained at $0.000 < \alpha < 0.05$, so it can be concluded that H1 is accepted, which means that there is an Effect of Health Education Through Leaflets and Video Media on Knowledge of the Dangers of Smoking in Students of Junior High School 1 Peterongan.

Results: The results of the study showed that before the treatment, most respondents had a low level of knowledge, with a total of 32 people (57.1%), and no respondents had knowledge in the good category. After the treatment, most respondents had sufficient knowledge, namely 28 people (50.0%), while only a few respondents were still in the low category, namely 2 people (3.6%).

Conclusion: Health education has a significant impact on students' knowledge of the dangers of smoking. Increasing knowledge about the dangers of smoking is very important for teenagers. The role of parents in supervising teenagers is also crucial to prevent smoking behavior and achieve the expected results.

Keywords: Health Education, Knowledge, the Dangers of Smoking.

INTRODUCTION

Smoking is an unhealthy habit that can cause various diseases. This habit seems to have become a culture in Indonesia, although many smokers realize and admit that cigarettes can cause various health problems. Because the effects of cigarette smoke are often not immediately felt, people tend to be less aware of the dangers caused. Even though there is an appeal not to smoke in certain areas, it seems that this has not shown significant results. According to WHO in 2019, tobacco causes the deaths of more than 8 million people each year worldwide. Of that number, more than 8 million deaths are caused by direct tobacco use, while around 1.2 million deaths are caused by passive smoking. Countries in the Association of South East Asian Nations (ASEAN) account for 10% of the total global smokers and 20% of tobacco deaths worldwide. Indonesia, in particular, has the highest proportion of smokers in ASEAN, with more than 50% of smokers (Drope & Neil, 2018). The number of active smokers among adolescents (10-18 years) increased from 7.2% in 2013 to 9.1% in 2018 (Almaidah et al., 2020).

In the East Java Provincial Health Statistics report published on August 29, 2022, the Head of BPS East Java, Dadang Hardiwan, revealed that in 2021, the percentage of the population who smoke tobacco every day in rural areas reached 25.95%, higher than the percentage in urban areas which was only 22.94%. In addition, 0.34% of the population aged 10-14 years smoked, while the percentage increased to 11.41% in the 15-19 age group.

Based on a preliminary study conducted at the Junior High School 1 Peterongan on October 23, 2023, it was found that out of 15 students interviewed, 6 of them had tried smoking. Based on the results of distributing questionnaires to 15 students, it was found that 13 of them did not know and understand the dangers of smoking and one of their family members was an active smoker. Cigarettes are very dangerous for health because they contain addictive substances and thousands of toxins that can damage all organs of the human body.

Health promotion aims to improve public health through a promotive and preventive approach, with a focus on behavioral change for independent health care. One method of health promotion is through media, such as posters, which make it easier to convey health messages effectively. Posters offer attractive images, are practical, durable, inexpensive, and do not require electricity, making them ideal for health education in various places (Syam et al., 2022).

Health education can use various methods and media to convey messages. Leaflets and posters are commonly used media because they offer attractive images and complete information, are practical to carry, easy to learn, and do not require electricity (Hidayati et al., 2019). Based on the explanation above, the author is interested in researching "The Influence of Health Education Through Leaflet and Video Media on Knowledge of the Dangers of Smoking in Students of Junior High School 1 Peterongan".

METHODS

Study Design

This research method used a quasi-experimental design with a one-group pretest-posttest approach.

Setting

This research was conducted at Peterongan 1 Junior High School in November 2023.

Research Subject

The study involved a population of 225 grade VII students of Junior High School 1 Peterongan, with a sample of 56 respondents selected randomly.

Instrument

In measuring the level of knowledge, researchers used a questionnaire that had previously undergone reliability and validity tests.

Data Collection

In this study, researchers measured the level of knowledge of respondents twice, namely before and after being given treatment in the form of health education about the dangers of smoking using leaflets and videos.

Data Analysis

The research data were subjected to statistical tests using the Wilcoxon test with a correlation coefficient value of 0.05.

Ethical Consideration

This research has been declared to have passed the research ethics test by the College of Health Science of Husada Jombang and has also received permission to carry out activities from the Junior High School 1 Peterongan.

RESULTS

Characteristics of Respondents

Based on the research data in Table 1, it was found that the majority of respondents were aged 13-14 years, as many as 54 respondents (96.4%). Most of the respondents were female, as many as 32 respondents (57.1%), and the majority of respondents were passive smokers and did not smoke directly, as many as 45 respondents (80.4%).

Table 1. Characteristics of Respondents Based on Age, Gender, Smoking Group, Number of Cigarettes Consumed in a Day at the Junior High School 1 Peterongan on November 2023.

Characteristics of Respondent	Frequency (f)	Percentage (%)
Age (Years Old)		
11-12 Years Old	2	3.6
13-14 Years Old	54	96.4
Total	56	100.0
Gender		
Male	24	42.9
Female	32	57.1
Total	56	100.0
Smoking Group		
Active	11	19.6
Passive	45	80.4
Total	56	100.0

Number of Cigarettes Consumed in a Day		
Did not smoke	45	80.4
1-5 Cigarettes	11	19.6
Total	56	100.0

Sources: Primary Data of Research, 2023.

Examination of the Influencing of Health Education Through Leaflets and Video Media on Knowledge about the Dangers of Smoking in Students of Junior High School 1 Peterongan using Wilcoxon Test

Table 2. The Influencing of Health Education Through Leaflets and Video Media in Knowledge about the Dangers of Smoking in Students of Junior High School 1 Peterongan using Wilcoxon Test.

Knowledge Level	Before Health Education		After Health Education		Wilcoxon Test
	f	%	f	%	
Good	0	0.0	26	46.4	Asymp. Sig. (2-tailed) 0.000
Moderate	24	42.9	28	50.0	
Low	32	57.1	2	3.6	
Total	56	100.0	56	100.0	

Sources: Primary Data of Research, 2023.

Based on the research data in Table 2, it was found that before the action in the form of health education about the dangers of smoking was given, the level of knowledge of the respondents was at a low level of 32 respondents (57.1%). After being given health education about the dangers of smoking, the level of knowledge of the respondents increased to a moderate level of 28 respondents (50.0%) and a good level of 26 respondents (46.4%). The results of the statistical test conducted by the researcher using the Wilcoxon test showed that Asymp. Sig. (2-tailed) $0.000 < \alpha 0.05$.

DISCUSSION

Student's Knowledge of Junior High School 1 Peterongan Before Health Education

The results of the study showed that before the treatment, most respondents had a knowledge level in the poor category, with a total of 32 respondents. There were no respondents who had a good knowledge level. Table 1 indicates that almost all respondents aged 13-14 years know the dangers of smoking in the poor category, with a total of 31 respondents.

According to Hidayat (2015), knowledge is the result of curiosity about objects through the senses. Knowledge is obtained through a learning process that is influenced by personal experience, sources of information, and social and cultural conditions. One of the factors that influences knowledge is age. Age, which is calculated from birth to the present, is related to increased memory and knowledge. According to Notoatmodjo (2018), the older a person is, the more mature their thinking and knowledge. Nursalam (2016) added that older people tend to have better knowledge about the dangers of smoking compared to younger people.

Student's Knowledge of Junior High School 1 Peterongan After Health Education

After being given health education, the level of respondents' knowledge about the dangers of smoking showed that most respondents, namely 28 respondents, were in the sufficient knowledge category.

Health education is an effort to convey health messages to adolescents, to increase their health knowledge (Tivany Ramadhani et al., 2023). Health education provided to respondents in this study had a positive impact on students' knowledge about the dangers of smoking, both directly and through leaflets and videos. Questionnaire observations showed a significant increase in knowledge after health education, according to the theory (Syam et al., 2022) that media is used to facilitate the delivery of messages to educational targets. One of the media that is often used is leaflet media. This leaflet media can display attractive images, be more complete, more practical to carry, durable, cheap to make, provide a sense of beauty, and make it easier to understand and easy to learn anywhere. It is the same as video media which is a type of learning media that has complete elements because it combines audio, visuals, and motion (Kurniati et al., 2020).

Health education significantly affects students' knowledge about the dangers of smoking. Before health education, most respondents (31 respondents) had insufficient knowledge. After health education, there was a clear improvement, with most respondents (27 respondents) showing sufficient knowledge.

The Influencing of Health Education Through Leaflets and Video Media in Knowledge about the Dangers of Smoking in Students of Junior High School 1 Peterongan

The results of the Wilcoxon test with SPSS obtained an Asymp. Sig. (2-tailed) value of $0.000 < \alpha 0.05$. then H1 is accepted, which means that there is an Effect of Health Education Through Leaflets and Video Media on Knowledge of the Dangers of Smoking in Students of SMP N 1 Peterongan by Notoatmodjo's theory in Hulu & Zai (2021).

The study conducted for one day by providing health education through leaflets and videos showed a significant increase in the knowledge of SMPN 1 Peterongan students about the dangers of smoking. This is evident from the increase in the percentage of student knowledge. Based on the questionnaire, most respondents knew the sufficient category (28 respondents), followed by almost half of the respondents who were in the good category (26 respondents), and only a few were in the poor category (2 respondents)

According to the results of research conducted by Lestari (2021), with the title the effect of health education on knowledge about the dangers of smoking in students at SMPN 8 Padang Sidempuan provides changes in the level of student knowledge about the dangers of smoking. This is proven by the results of the Statistical Test using the Wilcoxon Test, the Asymp. Sig. (2-tailed) value was obtained at $0.000 < \alpha 0.05$, these results indicate a positive change in the level of students' knowledge of the dangers of smoking after health education was carried out.

This study found that respondents' smoking behavior was influenced by the surrounding environment which triggered curiosity and cigarette trials. Respondents believe that smoking can help relieve stress, without fully knowing the health impacts it causes. This finding is in line with previous studies showing that factors such as parents, peers, personality, and cigarette advertising influence smoking behavior (Afifah, 2022).

The results showed that health education had a major impact on students' knowledge of the dangers of smoking. After the intervention, there was a significant increase in respondents' knowledge. Increasing knowledge about the dangers of smoking is very important for adolescents, and the role of parents in supervising them is necessary to prevent smoking behavior as expected.

CONCLUSION

The results of the Wilcoxon test with SPSS show an Asymp. Sig. (2-tailed) value of 0.000, which means that this value is smaller than α 0.05. This shows that health education through leaflets and video media significantly influences knowledge about the dangers of smoking in SMPN 1 Peterongan students. The use of leaflets and video media is effective in conveying material because the interesting images in them make respondents more interested and easier to understand the information provided.

SUGGESTION

Based on the results of this study, it is recommended that the use of health education materials, such as leaflets and video media, be continued and possibly expanded to educate students about the dangers of smoking. The significant improvement in students' knowledge following these interventions suggests that these tools effectively convey important health information in an engaging and comprehensible manner. To build on these findings, schools could implement regular health education sessions incorporating multimedia materials, as this approach not only enhances knowledge but may also contribute to shaping healthier behaviors in the long term. Collaboration with parents and guardians to reinforce these educational messages at home is also suggested, as it could further support a comprehensive and preventive approach to reducing smoking initiation among adolescents.

LIMITATION

This study was conducted freely, without any constraints or limitations that might influence the research process or outcomes.

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