

The Influence of Health Education About the Dangers of Smoking on the Knowledge of Adolescents in Lopang Domba Serang Village, Banten in 2022

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ABSTRACT

Smoking is a habit that poses a risk to others as well as smokers. It is crucial that teenagers understand the risks associated with smoking in order to help them avoid chronic illnesses. The purpose of this study is to ascertain how adolescents' understanding of the risks associated with smoking is impacted by health education. This study employs a one-group pretest-posttest quasi-experimental design, additionally employing a purposive sampling strategy and the paired t-test statistical test with a sample size of 43 respondents. The mean score on the pretest was 10.86, and the mean score on the posttest was 15.07. Teenagers' average knowledge on the pretest and posttest differed, and the difference is -4.209. The teenage knowledge paired t-test yielded a p-value of less than 0.001. The study's conclusion is that adolescents' knowledge is influenced by health education regarding the risks associated with smoking. Advice for managers in Lopang Domba Village: Work with neighborhood health centers to organize a campaign about the negative effects of smoking on public health and display informational posters about those effects.

Introduction

Smoking is a daily habit and has become an inevitable need for some people to smoke cigarettes. Cigarettes can make users dependent because they are made from addictive substances. The ingredient contained in it is nicotine. Within 7 seconds, nicotine will reach the brain after someone inhales cigarette smoke. This nicotine content provides a temporary pleasurable effect on the user's brain and leads to dependence. If the body of someone who is addicted does not receive nicotine intake, he will feel anxious and irritable (IDAI, 2017).

The overall prevalence of teenage smoking in Indonesia is 7.2%. Men are much more likely to be affected than women. Teenagers with more education are more likely to smoke than those with less education, and teenagers from low-income families are more than twice as likely to smoke as those from wealthier families (Kusumardani, 2018).

In 2013 and 2018, reports from the Ministry of Health stated data and information that Indonesia was classified as a country with the highest tobacco use, especially among adults and teenagers. From 2013 to 2018, it shows that the prevalence of adults has not decreased, while in adolescents aged 10-19 years there has been an increase of 20%, namely 7.2% in 2013 and 9.1% in 2018. This is clearly stated by the Center Data and Information from the Indonesian Ministry of Health in 2018 which shows the results of the report that Banten Province has a prevalence rate that exceeds the national average (29.3%), namely 31.3% (Kementrian Kesehatan RI, 2018).



There are several factors that influence the habits of teenagers who are familiar with smoking, including teenagers' insight into smoking, the impact of the social environment, the facilities and infrastructure provided and the psychology of the teenagers themselves. (Baharrudin, 2017).

According to the results of interviews from a preliminary study carried out in Lopang Domba Village, it was found that around 7 people had started smoking since entering junior high school, 3 teenagers had smoked since high school. From the 10 teenagers, it was found that teenagers knew about the dangers of smoking from reading cigarette packaging and advertisements, but they did not know the specific short-term and long-term dangerous effects of smoking.

Interviews from 10 teenagers who were active smokers, 70% of teenagers in Lopang Domba Village said they smoked. Even though the first reason some people smoke is to try it or just follow along with their friends, in the end smoking becomes a habit that is difficult to stop.

Even though teenagers in the Lopang-Domba village environment are aware of the risks arising from smoking, they still smoke because of their peers, environment and upbringing. However, many people don't know the dangers of smoking which can cause serious health impacts. The urgency in this research is For this reason, researchers are interested in finding out the effect of health education about the dangers of smoking on the knowledge of adolescents in the village of Lopang Lamb-Serang, Banten as a research study. Smoking is a habit that is very damaging to the body's health, starting from the risk of serious diseases such as cancer, heart disease, to negative impacts on vital organs such as the lungs and circulatory system. The aim of this research is to determine the effect of health education about the dangers of smoking on the knowledge of adolescents in Lopang Lamb-Serang village, Banten.

Methods

The research design in this study is a Quassy Experimental type with a one group pre-test post-test design. The pre-test is the first step in providing treatment to the sample, then health education about smoking will be given to the sample after which it continues with the post-test (Notoatmodjo, 2012). The total number of subjects in the research or in short the research object is called the population (Notoatmodjo, 2012). The population in this study were teenagers in Lopang Domba Serang Village, Banten in 2022 with a population of 90 teenagers. Meanwhile, a representative or part of the population to be studied is called a sample which is taken from 10-15% and 20-25% or even more (Arikunto, 2010). So in this study the sampling technique used purposive sampling and the sample obtained in this study was 43 teenagers in Lopang Domba village with an age range of 13-20 years. The research location was carried out in Lopang Domba Serang Village, Banten in 2022 and this research was carried out in March-June 2022. The data collection stage was carried out in May 2022. In a study, of course there will be such things as data collection techniques to obtain data. needed in research (Hidayat, 2017). In this study, data will be collected by using an online questionnaire link to respondents containing smoking knowledge. The questionnaire is filled out before health measures are carried out and after health measures are given. And the data collection tool uses a questionnaire, a questionnaire is a data collection tool that contains questions aimed at respondents (Hidayat, 2017). Inclusion criteria were having a smoking habit of around 1 cigarette per day for at least 1 year until the time the research was conducted (regular smoker) and being willing to take part in the



research. Exclusion criteria were smoking habits only occasionally (not regular smokers) and refusing to take part in the research. The results of the normality test on pre and post data are normal. This is shown by dividing the skewness and standard error values, the results obtained for pre = 0.6 and for post = 0.2 so that it can be concluded that the distribution is normal.

In this study there was a questionnaire on adolescent knowledge about the dangers of smoking. The instruments in this research are as follows:

a. Respondent identity

The identity of the respondent includes the respondent's name, age, education, each consisting of one question item.

b. Questionnaire A (Knowledge questionnaire)

This questionnaire consists of 20 questions, where the questions are aimed at finding out the level of knowledge of teenagers about the dangers of smoking. In this questionnaire, a score of 1 will be given to respondents who answer correctly, while a score of 0 will be given to respondents who answer incorrectly.

This research has received permission from the Ethics Committee with letter number 070/KEPK.UF/VI/2022 dated 30 June 2022.

Results

Research data can be presented using a table with the results of univariate and bivariate analysis

Univariate Analysis

Table 1 Average knowledge before implementing health education

Variable	Mean	SD	SE-Mean	Min-Max
Knowledge Before Penkes	10.86	2.61	0.404	5-15

Source: Primary Data 2022

From table 1 above, it can be seen that the average knowledge score of adolescents before implementing health education was 10.86, standard deviation 2.651, standard error 0.404 where 5 is the lowest knowledge score and 15 is the highest knowledge score.

Table 2 Average knowledge after implementing health education

Variabel	Mean	SD	SE-Mean	Min-Max
Knowledge after Penkes	15.07	2.424	0.370	9-20

Source: Primary Data 2022



From table 2 above, it can be seen that the average knowledge score of teenagers after implementing health education is 15.07, the standard deviation is 2.424, and the standard error is 0.370 where 9 is the lowest knowledge score and 20 is the highest knowledge score.

Discussion

A. Univariate Analysis

1. Average Knowledge of Adolescents Before Health Education is implemented

Based on table 5.1. It is known that the average knowledge score of adolescents before implementing health education is 10.86 with a standard deviation of 2.651 and a standard error of 0.404. The results of this study illustrate that the average knowledge of adolescents before implementing health education is still very low, this can be seen from the analysis of questionnaire answer scores which vary from the lowest answer of 5 to the highest answer of 15.

The low knowledge of teenagers about the dangers of smoking can be seen from the results of the questionnaire answers which show that the majority of respondents have not been able to answer correctly about knowledge questions such as substances contained in cigarettes, the dangers of cigarette smoke, the effect of cigarettes on the lungs, the short-term impact of smoking, dangerous substances. in cigarettes, cancer-causing substances in cigarettes and bad risks due to smoking.

2. Average Knowledge of Adolescents After Implementing Health Education.

According to the findings, adolescents had an average knowledge score of 15.07 after receiving health education, with a standard deviation of 2.424 and a standard error of 0.370. Knowledge scores ranged from 9 to 20, with 20 being the highest. These findings show that after education, the average level of knowledge of respondents increases. While the average knowledge of respondents before receiving health education was 10.86, the average knowledge of respondents after receiving health education increased to an average of 15.07.

The increase in respondents' knowledge after implementing health education can be seen from the scores of respondents' answers to questions asked by researchers, where the majority of respondents were able to answer questions correctly, such as the question "dangerous substances in cigarettes, the effect of cigarettes on the lungs, the consequences of long-term smoking, impact of smoking in the short term, dangerous substances in cigarettes, substances that cause cancer in cigarettes, chemicals in cigarettes that damage the stomach, function of cigarette filters, the effect of cigarettes on the lungs, substances in cigarettes that cause irregular heartbeats, risks for smokers, the causes of teenage smoking, the effect of smoking on the reproductive organs and respondents knowing the effect of smoking on the digestive organs."

B. Bivariate Analysis

1. The Influence of Health Education on the Level of Knowledge of Adolescents about the Dangers of Smoking among Adolescents in Kampung Lopang-Domba Serang Banten.



The research results showed that the average knowledge score of adolescents before receiving health education was 10.86, while after receiving health education their average knowledge score was 15.07. According to research findings, there was a gap of 4,209 points between the average knowledge level before and after the introduction of health education.

The increase in respondents' understanding was the result of the health education that researchers provided to them. This is in accordance with the thesis put forward by Azwar (2010), which states that health education is an effort or action to foster healthy knowledge and behavior in society. Therefore, health education about the risks of smoking aims to increase children's awareness about the substance and its risks so that they can avoid and stop doing activities that are bad for their health. It is hoped that with increasing knowledge of respondents, they will become more diligent in quitting smoking.

In the statistical test, the results were obtained in the form of a p value of 0.000, at alpha 0.05, $p < \alpha$ was obtained, so it can be concluded that there is a significant influence of the implementation of health education about the dangers of smoking on the knowledge of teenagers in Kampung Lopang-Domba Serang in 2022. These results illustrate the existence Respondents' knowledge increased significantly after health education was implemented. This increase in knowledge is interpreted as the result of health education carried out by researchers using Animation Video media, SAP and continued with evaluation by conducting questions and answers to respondents. The selection and use of media is an important component in providing health education. According to Maulana (2016), by seeing, hearing and reading directly the material in the animated video can be channeled into the brain thereby increasing teenagers' knowledge about the dangers of smoking.

The audiovisual media chosen in this study received a positive response from respondents as a medium for conveying information about health. This media provides good counseling because apart from interesting videos, it is also equipped with music as an introductory rhythm which aims to relax and increase the focus of health education participants in listening to the health education material so that participants get maximum learning results that can be used in life (Notoatmodjo, 2010).

Delivery of material via audiovisual directly provides opportunities for respondents to see and hear. Apart from that, the researcher as moderator also gave respondents the opportunity to ask questions directly about material they did not understand, so that respondents really received the researcher's explanation directly. This is relevant to the opinion expressed by Notoatmodjo. S (2012), namely health education or health promotion as a process to provide people with the ability to maintain and improve their health. This health promotion is a program that has been designed and aims to provide positive change to society and organizations in the community itself. One of these changes is knowledge, through a health education process about the dangers of smoking.



Conclusion

Based on the theory explained above, it can be concluded that audiovisuals can be a useful forum for health education because they provide positive effects related to providing information about the dangers of smoking. Thus, it is hoped that this will reduce the number of smokers, especially among teenagers. After knowing that there is an influence of health education regarding the dangers of smoking on the knowledge of teenagers in Kampung Lopang Domba Serang Banten, it is necessary to conduct research on other variables that might have an influence, for example factors, environment, friends, and smoking behavior, customs, culture.

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