

he_Dangers_of_Smoking_in_Students_of_SMK_Negeri_4_Yogyakarta.pdf

by Universitas Ahmad Dahlan Yogyakarta 26

Submission date: 20-Sep-2024 12:28PM (UTC+0700)

Submission ID: 2459758285

File name: he_Dangers_of_Smoking_in_Students_of_SMK_Negeri_4_Yogyakarta.pdf (382.41K)

Word count: 2697

Character count: 13896



Article

The Effect of Health Education on The Dangers of Smoking in Students of SMK Negeri 4 Yogyakarta

¹Prisilla Maya Heni Pratiwi, ²Novi Wijayanti Sukirto, ³Rachma Greta Perdana Putri*, ⁴Fardiasih Dwi Astuti

Email (Corresponding Author) : *rachmagreta@med.uad.ac.id

¹Bachelor degree, Faculty of Medicine, Universitas Ahmad Dahlan, Yogyakarta

²Department of Internal Medicine, Faculty of Medicine, Universitas Ahmad Dahlan

³Department of Anatomical Pathology, Faculty of Medicine, Universitas Ahmad Dahlan

⁴Faculty of Public Health, Universitas Ahmad Dahlan

ARTICLE INFO

ABSTRACT

Article history
Received 04-04-24
Revised 16-05-24
Accepted 25-05-24

1

Keywords

Smoking
Health Education
Smoking Hazard Knowledge

Smoking is the activity of smoking tobacco rolls wrapped in paper or nipa leaves and then burning and producing smoke. In the survey results of the Ministry of Health of the Republic of Indonesia, the risk of smoking behavior in junior and senior high school students in Indonesia in 2015 was 32.82% in male students. Smoking habits lead to health risk for cardiovascular and respiratory diseases and many types of cancer. Smokers have moderate knowledge about tobacco. The study aim is to examine the effect of health education on knowledge of the dangers of smoking in students of SMK Negeri 4 Yogyakarta. This study utilized a pre-experimental design method with One-Group Pretest-Posttest design approach. The study sample consisted of 127 students who met inclusion and exclusion criteria in class X students of SMK Negeri 4 Yogyakarta. The pretest and posttest scores varied from 22 to 29 with increased scores of the posttest's trend. Statistical analysis using *chi-square* test analysis showed a *p-value* of 0.000 (<0.05). These results suggest that there is an influence between health education on knowledge of the dangers of smoking in students of SMK Negeri 4 Yogyakarta.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



INTRODUCTION

Smoking is the activity of smoking tobacco rolls wrapped in paper or nipa leaves which are then burned and produce smoke. Indonesia is the country that consumes the most cigarettes in ASEAN with a percentage of 46.16%. In the survey results of the Ministry of Health of the Republic of Indonesia for junior and senior high school of Indonesian students in 2015, it was

found that 32.82% of male students tried to smoke for the first time at the age of <13 years. Based on WHO data in 2018, 6.5% of adolescents smoke at the age of 13-15 years and 4% of them are women. Several factors can influence adolescents to carry out smoking activities, such as environmental factors (48%), seeing friends who smoke (24%), seeing parental behavior (10.7%), and also seeing siblings (6.6%). The factor that plays the role of causing smoking behavior in early adolescence (11-15 years) is wanting to know the taste of cigarettes, while in middle adolescence (15-18 years) is seeing their friends smoking^{1,2}. The prevalence of smokers in the Special Region of Yogyakarta is 23.9%. According to the Basic Health Research in 2013, the Special Region of Yogyakarta (DIY) for the population aged ≥ 10 years was exposed to cigarette smoke in the house as much as 66.9% and increased in 2018 as much as 68.6%³.

According to WHO, the consequences of someone who smokes can cause fatal health problems and become one of the causes of death with approximately 6 million cases a year⁴. Smoking has harmful effects or impacts on human health. These effects are not only harmful to the person doing the smoking activity, but also harmful to the surrounding community. The content contained in cigarettes can cause damage and several diseases, such as esophageal disease, bronchial disease and lung disease⁵. In addition, cigarettes are a carcinogen and can cause DNA damage⁶.

The study in Chinese stated that the prevalence of smoking remained high in Chinese adults with poor knowledge about smoking hazards. Another study in Portugal clarified that respondents who had ceased smoking had a significantly higher knowledge score of tobacco use than those who still smoked and those who had never smoked. One of the strategies to change healthy behavior in adolescents is to provide additional health knowledge so that adolescents can make decisions related to their health appropriately. Health education is one way to help broaden adolescents' knowledge or convey health messages to them to gain good knowledge about health⁵. Health education can be provided in various ways, one of which is with learning videos. Learning videos present information audio and visually so that messages can be received evenly, more interesting, varied, and fun^{7,8}. This study aims to determine the effect of health education on knowledge of the dangers of smoking in students of SMK Negeri 4 Yogyakarta.

METHODS

This study is a quantitative study using a pre-experimental approach method with a one-group pretest-posttest design. This research obtained permission from the Ahmad Dahlan University Research Ethics Committee (KEP) with the number 012307152. The research was conducted on 29th and 30th of May 2023 with subjects consisting of 127 students of class X SMK Negeri 4 Yogyakarta who met the inclusion and exclusion criteria.

The sample size was calculated using Slovin methods. The inclusion criteria in this study were class X students of SMK Negeri 4 Yogyakarta who were willing to participate in the study and signed an informed consent sheet. The exclusion criteria in this study were students who were not present during the study. In this study, health material about the dangers of smoking was delivered through videos and discussions after the video was shown. Students filled out questionnaires before the material was delivered and after the discussion was completed.

RESULTS

Based on the results of the research conducted, Table 1 describes the characteristics of age and gender. In the age variable, the results showed that there were 127 respondents. The majority of the Respondent's age was 16 years old (94 people) and most of them were female (61.4%).

Table 1. Frequency Distribution of Characteristics of Research Subjects at SMK Negeri 4 Yogyakarta

Variable	Total (n)	Percent (%)
Age		
15	12	9.4
16	94	74.0
17	20	15.7
18	1	8
Gender		
Male	49	38.6
Female	78	61.4
Total	127	100

Table 2. Frequency Distribution of Pretest and Posttest Score Categories at SMK Negeri 4 Yogyakarta

Value	Pretest			Posttest		
	n	%	mean	n	%	mean
22	7	5.5		2	1.6	
23	2	1.6		3	2.4	
24	15	11.8		5	3.9	
25	19	15.0		9	7.1	
26	27	21.3		19	15.0	
27	19	15.0	26.14	24	18.9	27.17
28	32	25.2		38	29.9	
29	6	4.7		24	18.9	
30	-	-		3	2.4	
Total	127	100		127	100	

Table 2 shows the results of the pre-test and post-test. The mean result of the pretest was 26.14 and the mean of the posttest scores was 27.17.

Table 3, shows the level of knowledge before and after counseling. There was an increasing number of respondents that have good knowledge after counseling.

Table 3. Frequency Tabulation of Knowledge Categories Before and After Counseling on the Dangers of Smoking

Variable	Categories	Before counseling		After counseling	
		n	%	n	%
Knowledge	Good (≥26)	8	66.14	10	85.0
		4		8	
	Poor (<26)	4	33.9	19	15.0
		3			

Statistical analysis using the chi square test between health education and the level of knowledge has a p-value <0.05 (p=000), it can be concluded that there is a relationship between health education and the level of knowledge of students of SMK Negeri 4 Yogyakarta.

DISCUSSION

According to Kurt Lewin's theory, smoking behavior is influenced by a combination of environmental factors and individual factors, which suggests that smoking habits are not solely influenced by internal factors within adolescents, but are also influenced by the surrounding environment¹⁸. Health education aims to change unhealthy behavior into healthy behavior, both physically and mentally. By providing adolescents with an understanding of the health risks of smoking, tobacco control strategies among adolescents can be developed^{19,20}. Knowledge is the result of a person's sensing of objects using their five senses. Knowledge has stages: knowing, understanding, application, analysis, synthesis, and evaluation. A person's knowledge cannot be obtained quickly. Several factors that affect the level of knowledge are age, education level, occupation, experience, and also the source of information. Knowledge can be improved by a person's interest in obtaining information^{9,10}. Indirectly, a person's knowledge can influence their actions because knowledge can influence a person's attitude and behavior. Lack of knowledge about the effects of smoking can play a role in the increasing prevalence of smoking among adolescents. Ignorance about the effects of smoking can lead to an increase in the number of smokers among adolescents. In addition, everyone can gain knowledge through counseling¹¹.

A person's level of knowledge about smoking affects their ability to control their health. Knowledge plays an important role in changing people's mindsets, and this change must be based on good knowledge to be sustainable¹². Although everyone is aware of the dangers posed by smoking, this habit has never diminished and seems to be accepted by society. One way to overcome smoking in adolescents is to provide counseling programs in schools regarding the dangers of smoking^{9,10}. The improvement of the outcome after intervention (health education) in

the harm of smoking was similar to the research conducted by Hadi. Studies conducted on medical students confirm that knowledge is not only one factor that affects smoking habits, but also social and environmental factors.

The results of this study are in line with research conducted by Makalalag (2021)¹³, which states that the use of videos as learning aids has a positive impact on student learning achievement. The use of videos in the learning process creates an interesting and not boring atmosphere for students, attracting their attention to videos that contain information about learning materials. Educational media, such as videos, have the potential to improve students' knowledge levels. Health education through video media has the advantage of providing clear visualization, which facilitates better understanding of knowledge^{13,14}. This audio-visual media approach can improve learning outcomes, such as remembering, recognizing, recalling and connecting facts and concepts. This media has better capabilities by combining auditory (hearing) and visual (vision) elements. In addition, moving objects can be depicted with interesting sounds and can convey messages in a way that is easy to understand, comprehend, and the information received can be remembered longer^{13,15-17}. The limitations of the studies are the condition of the counseling session and the frequency of counseling sessions. Respondents do their pre test and post test together in one room and it was possible to cheat the answer to other respondents. Besides, the exposure to education about smoking's harm is only one time that may influence the retention of the information.

CONCLUSION

Health education has a good influence on the level of student knowledge related to the effects of smoking. The increase in the students' knowledge of smoking is expected to reduce the incidence of smoking. In this study, it was found that there was a significant effect on the level of student knowledge before and after being given health education. Further research that can be done is to assess the incidence of smoking in high school students, and the relationship about knowledge and attitude about smoking.

REFERENCES

1. Sekeronej DP, Saija AF, Kailola NE. Tingkat Pengetahuan Dan Sikap Tentang Perilaku Merokok Pada Remaja Di Smk Negeri 3 Ambon Tahun 2019. *PAMERI Pattimura Med Rev.* 2020;2(1):59-70. doi:10.30598/pamerivol2issue1page59-70
2. Jafari A, Mahdizadeh M, Peyman N, Gholian-Aval M, Tehrani H. Exploration the role of social, cultural and environmental factors in tendency of female adolescents to smoking based on the qualitative content analysis. *BMC Womens Health.* 2022;22(1). doi:10.1186/s12905-022-01617-0

The Effect Of Health Education On The Dangers Of Smoking In Students Of SMK Negeri 4

Yogyakarta (Prisilla Maya Heni Pratiwi)

3. Wibowo M, Mudayana AA, Khasanah ZM. Penerapan Dusun Kawasan Bebas Asap Rokok di Kabupaten Bantul, Yogyakarta. *J Kesehatan Masy Indones*. 2022;17(1):1. doi:10.26714/jkmi.17.1.2022.1-11
4. Fitriani F, Ekawati N, Sartika MS D, Nugrawati N, Alfah S. Pengaruh Pendidikan Kesehatan Terhadap Pengetahuan dan Sikap Remaja Tentang Seks Bebas. *J Ilm Kesehatan Sandi Husada*. Published online 2022:384-391. doi:10.35816/jiskh.v11i2.786
5. Gobel S, Pamungkas RA, ARS V. Bahaya Merokok Pada Remaja. *J Ilm Kedokt dan Kesehat*. 2020;3(1):185-195. doi:10.55606/klinik.v3i1.2285
6. Chang JT, Anic GM, Rostron BL, Tanwar M, Chang CM. Cigarette smoking reduction and health risks: A systematic review and meta-analysis. *Nicotine Tob Res*. 2021;23(4):635-642. doi:10.1093/ntr/ntaa156
7. Umami H, Rahmawati F, Maulida MN. Pengaruh Media Video Edukasi Tentang Vulva Hygiene Terhadap Tingkat Pengetahuan dan Sikap Remaja Putri. *J Kesehatan Saemakers PERDANA*. 2021;4:42-50.
8. Suryani S, Nadia N. Peran Media Video Animasi Dalam Meningkatkan Pengetahuan Gizi Ibu Hamil. *Nurs Care Heal Technol J*. 2022;2(1):37-47. doi:10.56742/nchat.v2i1.34
9. Rudi A, Suwito KP, Pratama RY, Rudiandiyah R, Haryanti Y. Pengaruh Penyuluhan Tentang Bahaya Merokok terhadap Pengetahuan dan Sikap Ibu Rumah Tangga. *J Ilmu Kesehatan Masy*. 2023;12(04):264-269. doi:10.33221/jikm.v12i04.1818
10. Jebunnahar, Biswas HB, Hossain S, Islam S. Awareness on Health Effects of Smoking Among Secondary School Children in Bangladesh. *Int Conf Kerta Cendekia Nurs Acad*. 2019;1:221-231.
11. Guo SE, Chen MY, Okoli C, Chiang YF. Effectiveness of Smoking Prevention Programs on the Knowledge, Attitudes, and Anti-Smoking Exposure Self-Efficacy among Non-Smoking Rural Seventh-Grade Students in Taiwan. *Int J Environ Res Public Health*. 2022;19(15). doi:10.3390/ijerph19159767
12. Jannah M, . H. Pengaruh Penyuluhan Terhadap Pengetahuan Remaja Tentang Rokok Di Sma Negeri 2 Palopo. *An-Nadaa J Kesehatan Masy*. 2022;9(1):8. doi:10.31602/ann.v9i1.5840
13. Makalalag DR, Mutmainah M, Anuli WY. Penggunaan Media Video Edukasi untuk Meningkatkan Hasil Belajar Siswa dalam Pembelajaran IPS Sekolah Dasar. *J Elem Educ Res*. 2021;1(2):68-78. doi:10.30984/jeer.v1i2.69
14. Hayat F. the Effect of Education Using Video Animation on Elementary School in Hand Washing Skill. *Acitya J Teach Educ*. 2021;3(1):44-53. doi:10.30650/ajte.v3i1.2135
15. Sayuti S, Almuhammad A, Sofiyetti S, Sari P. Efektivitas Edukasi Kesehatan Melalui Media Video Terhadap Tingkat Pengetahuan Siswa dalam Penerapan Protokol Kesehatan di SMPN 19 Kota Jambi. *J Kesmas Jambi*. 2022;6(2):32-39. doi:10.22437/jkmj.v6i2.20624
16. Aisah, S., Ismail, S. & MA. Edukasi Kesehatan Dengan Media Video Animasi: Scoping Review. *J Perawat Indones*. 2021;5(1). doi:10.32584/jpi.v5i1.926
17. Kamal AFIFY M. Effect of Interactive Video Length Within E-Learning Environments on Cognitive Load, Cognitive Achievement and Retention of Learning. *Turkish Online J Distance Educ*. 2020;21(4):68-89. doi:10.17718/TOJDE.803360
18. Barrington-Trimis JL, Braymiller JL, Unger JB, et al. Trends in the Age of Cigarette Smoking Initiation Among Young Adults in the US From 2002 to 2018. *JAMA Netw Open*. 2020;3(10):E2019022. doi:10.1001/jamanetworkopen.2020.19022
19. Aryawati LO. Hubungan Antara Pengetahuan Tentang Pendidikan Kesehatan dengan Perilaku Sehat Siswa (Studi Pada Siswa Kelas XI SMA Negeri 4 Blitar). *J Pendidik Olahraga Dan Kesehatan*. 2018;6(2):453-458.
20. Xu X, Chen C, Abdullah AS, Sharma M, Liu H, Zhao Y. Knowledge about and sources of smoking-related knowledge, and influencing factors among male urban secondary school students in Chongqing, China. *Springerplus*. 2016;5(1). doi:10.1186/s40064-016-3589-z

he_Dangers_of_Smoking_in_Students_of_SMK_Negeri_4_Yo...

ORIGINALITY REPORT

15%

SIMILARITY INDEX

15%

INTERNET SOURCES

0%

PUBLICATIONS

0%

STUDENT PAPERS

PRIMARY SOURCES



journal2.uad.ac.id

Internet Source

15%

Exclude quotes On

Exclude matches < 5%

Exclude bibliography On