



Community Medicine & Education Journal

Journal Homepage:

<https://hmpublisher.com/index.php/CMEJ>



Differences in the Effectiveness of Health Promotion through Video and Interactive Dialogue on Smoking Cessation Interest among Teenagers in Palembang

Vondy Holianto^{1*}

¹ Medical Education Study Program, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia D

ARTICLE INFO

Keywords:

Interactive Dialog
Video
Health Promotion
Smoking Cessation

Corresponding author:

Vondy Holianto

E-mail address:

holiantovondy@gmail.com

The author has reviewed and approved the final version of the manuscript.

<https://doi.org/10.37275/cmej.v2i1.111>

ABSTRACT

Cigarettes have long been recognized as a risk factor for various health problems, and are the world's largest preventable cause of death¹. Teenagers are more easily influenced especially by social groups to do negative things, such as smoking². Currently the trend to start smoking is increasing among teenagers. This study aims to compare the effectiveness of health promotion presented in the form of audio-visual and interactive dialogue on interest in quitting smoking in teens in Palembang. This research is an analytic study through a quasi-experimental approach with a pretest-posttest two group research design without control group. The research sample consisted of 206 teenage smokers, divided into 2 groups, namely 103 teenage in the video group and 103 teenage in the interactive dialogue group. This study uses paired t-test, Wilcoxon, and Mann Whitney test. This study reveals that health promotion through video media and interactive dialogue is effective to elevate the knowledge and interest in smoking cessation among teenagers ($p = 0.000$ $\alpha = 0.05$). The mean value of knowledge and interest in the interactive dialogue group is higher than in the video group. However, there was no difference concerning effectiveness of health promotion through interactive dialogue and videos on the knowledge and interest in quitting smoking among teenagers. ($p = 0.21$ $\alpha = 0.05$).

1. Introduction

Smoking is a bad habit that is now increasingly frequent and can almost be found in every society. Cigarettes have long been recognized as a risk factor for various health problems, and are the world's largest preventable cause of death¹. No less than 4000 chemicals are contained in tobacco leaves, and 2256 substances can be inhaled in the form of smoke³. The most common diseases that can be caused by these substances include heart disease blood vessel disease, cancer, to lung disease. Harmful substances in cigarettes that are widely known by the public such as tar, nicotine, and carbon monoxide.⁴

More than 8 million people worldwide die from cigarettes annually, with 7 million death caused by direct tobacco use, and 1.2 million deaths comes from secondhand smokers⁵. Cigarette consumption profile in Indonesia itself is very alarming. Indonesia ranked first as the country with the most prevalent male smokers in the world⁶. Every year, the number of cigarettes in Indonesia shows an increasing trend and in 2013, the prevalence rate has reached 36.3%. That means, 1 out of 3 people in Indonesia are smokers⁷.



<https://hmpublisher.com/index.php/CMEJ>

Teenagers are defined as a transition from childhood to adulthood which includes developments in cognitive, psycho-social, and biological aspects. This Adolescence period is further categorized into age range of 10-13 years (early adolescents), ages 14-17 years (mid teens) and 17-19 years (late adolescents)⁸. In this adolescence, children have high curiosity, and often interested in trying new things. Teenagers are also more easily influenced especially by social groups to do negative things, such as smoking.

Smokers are found in almost all age groups, however, there is an increasing trend of smoking among teenagers. According to health research in 2007, as many as 9.6% of adolescents aged 10-14 years had started smoking and in 2013, this number increased to 18%. An increase also occurred in adolescents aged 15-19 years, from 36.5% in 2007 to 55.4% in 2013. Most of these teenagers do not know the dangers of addictive substances contained in cigarettes for their health¹⁰. According to research by Ridha and Hernawan, knowledge of smoking is the biggest supporting factor (53% probability value) of smoking behavior in adolescents. Other factors that influence such as smoker family, smoker friends, and exposure to cigarette advertisements²⁷.

One of the means to reduce the number of smokers among adolescents is through health promotion activities. Green defines health promotion as all forms of a combination of health education with economic, political and organizational related interventions that are structured to create behaviors and environments conducive to health. Through health promotions, teenagers can get health information, health messages, and increase knowledge, especially about the harms that can be caused by smoking. There are various means that can be used to convey health information, such as audio (radio), visuals (leaflets, posters, etc.), audio-

visuals (television, videos, etc.), as well as through interactive discussions¹¹.

Relaying health information through video combines visual and audio elements to send health messages. Audio-visual media displays the message through effects and movements that ignite the interest of the audience so that the learning process becomes more robust¹². Research by Ira Rahmawati et al. also proves that audio-visual media is more effective than modules. But this media is only a one-way. Another form of health promotion method that reaches this shortcoming is through interactive dialogue.

The increasing trend of smoking among adolescents today, combined with the long-term health effects caused by the former, urges the need for health interventions. One intervention that has proven effective is through health promotion. On this occasion, researchers were interested in exploring the effectiveness comparison between two form of health promotion; audio-visual aid and interactive dialogue on smoking cessation interest among adolescents in Palembang.

2. Methods

This research is an analytic study through a quasi-experimental approach with a pretest-posttest two group research design without control group, consisting of two groups namely groups intervened with health promotion through video and groups intervened with health promotion through interactive dialogue. The population of this study is teenage smokers in the city of Palembang.

Samples are selected using purposive sampling technique, which is a sample that meets the inclusion criteria and does not meet the exclusion criteria, used as a sample until the minimum number of samples is met. The Inclusion Criteria is; adolescents who at the time of the study were residing in the city of Palembang, were willing to become respondents, and



at the time of the study they were still active smokers. 206 respondents were divided into 2 groups, namely 103 respondents in the video group and 103 respondents in the interactive dialogue group. The dependent variable in this study are knowledge about smoking and interest in quitting smoking among adolescents. The independent variable in this study are health promotion through video and interactive dialogue.

Primary data in this study were collected using a questionnaire that has been tested for validity and reliability. The form of the questionnaire used was a self-completed questionnaire which meant that the respondents filled out the questionnaire themselves. The questionnaire consisted of 10 questions about smoking knowledge and 4 questions about smoking cessation motivation. Respondents will fill in the same questionnaire before and after being given a health promotion. The data is collected and evaluated based on research criteria.

Data obtained from the questionnaire will be processed and discussed descriptively and analytically in the form of tables and narratives. Data

analysis will be performed using the Statistical Package for Social Science (SPSS) program version 16.0 for Windows. Analysis of the data used is univariate analysis to determine the frequency distribution of each variable studied. Bivariate analysis will then be performed to test different levels of knowledge before and after health promotion by calculating using paired t-tests if the data is normally distributed, and the Wilcoxon test if the data are not normally distributed. Furthermore, the analysis of the difference in effectiveness between the two types of health promotion is compared using the independent t-test if the data are normally distributed, or the Mann-Whitney test if the data are not normally distributed.

3. Results and discussion

After a descriptive analysis, it was found that the lowest age of all respondents was 14 years, while the highest age was 19 years. In table 1, it can be seen that the majority of respondents are in the age group of 17-19 years (late teens) with a total of 105 people.

Table 1. Distribution of teenagers based on age

Age Characteristic	Interactive dialogue		Video	
	n	%	N	%
10-14	3	2.9	7	6.8
15-16	38	36.9	53	51.5
17-19	62	60.2	43	41.7
Total	103	100.0	103	100.0

Respondents were grouped according to the age at which the respondent first smoked. From table 2, it was found that the average respondent started

smoking at the age of 14 years. Age The youngest respondent is 11 years old, and the highest is 17 years old.

Table 2. Distribution of teenagers based on the teenager's age when they start smoking

Age First Smoking	Interactive dialogue		Video	
	n	%	N	%
11	2	1.9	0	0
12	8	7.8	7	6.8
13	22	21.4	25	24.3
14	27	26.2	31	30.1
15	33	32.0	30	29.1
16	8	7.8	7	6.8
17	3	2.9	3	2.9
Total	103	100.0	103	100.0



Respondents were divided based on the number of cigarette consumption per day. There are 3 groups: 1-5 sticks, 6-20 sticks, and > 20 sticks. From Table 3,

it was found that the majority of respondents (70.8%) were light smokers who consumed 1-5 sticks of cigarettes per day.

Table 3. Distribution of teenagers based on smoking consumption classification

Smoker Classification	Interactive dialogue		Video	
	n	%	N	%
1-9	70	68.0	76	73.8
10-20	28	27.2	24	23.3
>20	5	4.9	3	2.9
Total	103	100.0	103	100.0

Respondents are grouped according to reasons why they started smoking. From table 4, it was found that the majority of respondents (59.2%) started smoking because of the influence of friends. Mass

media such as billboards, posters and cigarette advertisements play the smallest role a respondent starts smoking.

Table 4. Distribution of teenagers based on the reason to start smoking

Reason Start smoking	Interactive dialogue		Video	
	n	%	n	%
Influence from parents or siblings	11	10.7	13	12.6
Peer influence	60	58.3	62	60.2
Mass media Influence	5	4.9	4	3.9
Just curious	27	26.2	24	23.3
Total	103	100.0	103	100.0

The average level of knowledge of adolescents about smoking before health promotion is 31.98 in the dialogue group and 32.16 in the video group. In this study, the majority of respondents (79.6%) had knowledge of moderate cigarettes. There are no respondents with high knowledge. After health promotion through video media and interactive dialogue in accordance with each group, an increase in the average knowledge gained to 43.53 in the

dialogue group and 42.69 in the group. The Dialogue group had a higher average of 0.84. After health promotion, there was an increase in knowledge in both groups. Most of the respondents' knowledge falls into the high category either after intervention with dialogue or video. But there are differences in the number, where the dialogue group 94.2% high knowledge, while in the video group 85.4%.

Table 5. Teenage's knowledge about cigarettes before and after health promotion interventions

Knowledge	Interactive dialogue		Video	
	N	%	N	%
Pre-test				
Low	20	19.4	22	21.4
Moderate	83	80.6	81	78.6
Post-test				
Moderate	6	5.8	15	14.6
High	97	94.2	88	85.4



Interest in smoking cessation among respondents was assessed through the richmond motivation test score. Prior to health promotion, most respondents (61.1%) had moderate motivation to stop smoking. And only a small proportion (4.8%) from the

beginning had a high motivation to quit smoking. After an interactive dialogue, the number of respondents with high motivation (78%) was more than that of the group intervened with video (68%).

Table 6. Smoking cessation interest among teenagers before and after health promotion interventions

Interest	Interactive dialogue		Video	
	N	%	n	%
Pre-test				
Low	30	29.1	40	38.8
Moderate	67	65.0	59	57.3
High	6	5.8	4	3.9
Post-test				
Low	1	1.0	1	1.0
Moderate	21	20.4	32	31.1
High	81	78.6	70	68.0

Based on the results of the normality test, the knowledge data is normally distributed, thus the paired t-test was used. A Difference in the average value of pretest and posttest knowledge of 11.67 with a significance of 0,000 was Obtained. Because the value of p is <0.05, there are statistically significant differences in mean knowledge before and after the health promotion through interactive dialogue.

Data distribution for interest groups is not normal, so the analysis uses the Wilcoxon method. It was found that interest in quitting smoking after interactive dialogue was better than before the intervention. Wilcoxon test results showed a value of p = 0.000, meaning that statistically there were significant differences in interest between before and after interactive dialogue.

Table 7. Effectiveness of health promotion with interactive dialogue on knowledge and interest in smoking cessation among adolescents

Variable	Mean Difference	P
Knowledge		
<i>Pretest</i>	11,67	<0.0001
<i>Posttest</i>		
Interest	N	P
<i>Posttest < Pretest</i>	0	<0.0001
<i>Posttest > Pretest</i>	103	
<i>Pretest = Post test</i>	0	

Based on the results of the normality test, the knowledge data is not normally distributed, thus the Wilcoxon test was used. All respondents have better knowledge than before watching the video. The Wilcoxon test value indicates p <0.0001, so there is a statistically significant difference between before and after watching the video.

Data distribution for interest groups is not normal, so the analysis uses the Wilcoxon method. It was found that interest in quitting smoking after video intervention was better than before intervention. Wilcoxon test results showed a p value of 0.000, meaning that there were statistically



significant differences in interest between before and after health promotion through video.

Table 8. Effectiveness of health promotion with video media on knowledge and interest in quitting smoking in adolescents

Variable	N	P
Knowledge		
<i>Posttest<Pretest</i>	0	<0.0001
<i>Posttest>Pretest</i>	103	
<i>Pretest = Post test</i>	0	
Manner		
<i>Posttest<Pretest</i>	0	<0.0001
<i>Posttest>Pretest</i>	103	
<i>Pretest = Post test</i>	0	

The statistical analysis used is the Mann Whitney test because the data distribution is not normal. Mann Whitney test results found a mean difference value of (p = 0.15). This means that there is no significant difference in the average knowledge between adolescents given health promotion through both methods.

The mean interest in quitting smoking in the group that got interactive dialogue was greater than the group that got promkes through video. Significance was tested using the Mann Whitney mean test, and the results obtained were P values> 0.05. That is, there were no significant mean differences between groups by interactive dialogue with groups watching videos.

Table 9. Differences in the effectiveness of health promotion through video and interactive dialogue on knowledge and smoking cessation among adolescents.

Variable	N	%	Mean	P
Knowledge				0.15
Dialogue	103	50	43.5340	
Video	103	50	42.6990	
Interest				0.211
Dialogue	103	50	7.4466	
Video	103	50	7.2039	

Respondent's characteristic

Based on age, of 206 teenage smokers, most are in the age range of 17-19 years, with the most age at of 17 years old which categorized as late adolescent. This is in line with research conducted by Apriana, who in her research also received the most subjects in the 17-19-year range. cording to Riskedas 2013, the prevalence of smokers aged 15-19 years continues to increase from year to year10. In the late adolescent phase, adolescents starts to express their

freedom, and hang out with friends their age more often, making them more prone to develop smoking behavior in adolescents at this age41. Based on research by Arina, peers have a high influence on smoking behavior in children. The higher the peer support, the higher the smoking behavior in children. This study is in line with the characteristics of smokers in this study, where most respondents (59.2%) consume cigarettes because of peer influence. The influence of friends is also supported by the finding that respondents who are influenced



by friends tend to smoke when with friends. Research by Saputra states that in the early stages of smoking, 46% were carried out with his friends²⁸.

In this study, most respondents started smoking at the age of 15 years (30.6%) and 14 years (28.2%). This finding is not in accordance with research by aditama in 2014, which stated that overall smokers at the age of 13-15 years, started smoking at the age of 12-13 years (43.2%), and at the age of 14-15 years (11.7 %)4. At the age of 12-13 years is the early adolescent phase. Adolescent phase is characterized by rapid body changes and often causes difficulties in adapting and at this time, adolescents are looking for their identity. In its development, early adolescents expressed freedom and felt as an individual, not just as a family member. Teenagers also begin to feel a sense of belonging towards peers. As a result, adolescents begin to experiment more often, try new things, and greater peer influence¹³. This is consistent with the findings in this study, where at the age of starting smoking most found in early adolescence, and the most reasons for starting smoking at this age range is due to the influence of friends and curiosity.

In this study, most respondents smoked as many as 1-10 cigarettes per day (70.9%). According to WHO, a smoker is categorized into 3 groups based on the number of cigarettes they consume, namely light, moderate and heavy smokers. Light smokers are smokers who spend as much as 1-10 cigarettes per day, moderate smokers are consuming as many as 11-20 cigarettes every day, and heavy smokers spend more than 20 cigarettes per day. The results of this study are in line with studies by Ikhsan, who found the highest prevalence of teenage smokers being light smokers (1-10 cigarettes) compared to moderate and heavy smoker types¹⁴. In addition, researchers also found that for respondents who had been smoking for a long time, the number of cigarettes consumed was also higher. This can be seen from the data of

respondents who have smoked for 3 years with the number of sticks consumed 11-20 cigarettes per day as much as 32.7%. While those who have only smoked for one year, the average number of cigarettes consumed is 1-10 cigarettes (36.3%).

Effectiveness of health promotion through video on the level of knowledge and interest in quitting smoking in teenagers

In this study it was found that health promotion through video was effective in increasing respondents' knowledge towards increasing respondents' knowledge about cigarettes, (p-value = 0.000). Health promotion through video is also effective in increasing interest in quitting smoking in adolescents (p-value = 0.000).

These results are in line with research by Kasman on 20 teenagers in banjarmasin who were given health promotion using video. In this study, there was a significant increase in the average value (p-value <0.001) of adolescent knowledge about the dangers of smoking in adolescents between before and after health promotion through video media². Another study conducted by Firmansyah on 60 teenagers who were given promkes through video. There was a significant increase in the mean value (p-value <0.001) of teenage knowledge about smoking between before and after watching video¹⁵. Other research in line with this study was conducted by Ode, that found a significant increase in knowledge of junior high school students in Makurdi after delivering health messages through audiovisual media¹⁶.

Health promotion through video in this study was also significantly effective in increasing interest in smoking cessation among adolescents. These results are in line with research by Yessy and Nikmatur, who found a significant increase in interest in smoking control in adolescents at Jember PGRI Junior High School (p-value <0.001)¹⁷. Ariffah in her study of 26



teenagers in Yogyakarta also found a significant increase in quitting smoking interest (p-value 0.001) after health promotion through video¹⁸. Another study was conducted by Lailatul on 22 respondents at Sultan Agung Vocational School. This study concluded that health promotion through audiovisual media was effective in increasing the intention to stop smoking in adolescents with Wilcoxon test results which were worth 0,000 (p <0.05)¹⁹.

Hamida's research concluded that the use of media in the learning process will make learning more interesting so that participants can pay close attention, not get bored quickly, and the message they want to convey can be received by participants²⁰. In this case, researchers used video media. During the video playback, participants watched carefully and without distraction. Effectiveness of this health promotion on increasing knowledge and interest in quitting smoking in this study because when delivering messages via video, respondents use two senses namely hearing and sight. All senses are involved in the learning process. The more sensory devices involved, the information received and processed, the greater the information can be maintained in memory. According to Notoatmojo, the more senses that are being used to get something, the easier it is for someone to understand. In addition, the advantage of video media is that it can display physical or demonstration that cannot be presented in the learning process. Moving animated images also make respondents more entertained and display events that look more real so that respondents do not feel bored.

Effectiveness of health promotion through interactive dialogue on the level of knowledge and interest in stop smoking among adolescents

In the research, it was found out that health promotion through interactive dialogue was effective in increasing respondents' knowledge of cigarettes (p = 0.000). This shows that the increase in knowledge is significant before and after health promotion. Health promotion through interactive dialogue also increases interest in quitting smoking among adolescents (p = 0,000).

The results of this study support research conducted by Bachtiar, which states that there are significant differences in the knowledge of the dangers of smoking in adolescents between before and after health promotion through lectures, with a significance value of 0.039 (<0.05)²¹. Research by Alfarisy on 37 subjects also found an increase in adolescent knowledge about the dangers of smoking after health education through lectures, with a significance value of 0,000 (p-value <0.05)²². Yuliana's opinion is also in line with the results of this study. A study by Yuliana concluded that health promotion through lecture effectively increased adolescent knowledge with a significance value of 0.036 (p-value <0.05)²³.

Research by Santoso is in line with this research, where the study conducted by Santoso found an increase in smoking cessation attitudes among adolescent boys after being given health promotion through lectures⁵¹. Research by Ikhsan also found a significant effect on smoking cessation behavior in adolescents who were given health promotion lecture methods, with a significance value of p = 0,000 (p <0.05)²⁵.

Knowledge is the result of processing data obtained from human sensing, or the output of knowing someone about objects through their senses (eyes, ears, nose). Information obtained from the five senses until the formation of the information into knowledge is determined by attention, intensity, focus and perception of the object, consequently each



individual has a different level of knowledge. The results of this study indicate that the provision of knowledge through the sensing process is accompanied by active discussion involving the active participation of recipients of health promotion, giving good results. Respondents in interactive dialogue groups are more active and use their minds more. So the influence of knowledge gained by respondents through active interaction between the giver and recipient of this information makes respondents more remember and confident about the dangers of smoking behavior.

Differences in the effectiveness of health promotion through video and interactive dialogue on knowledge and interest in smoking cessation among adolescents

The results of this study indicate that there is a comparison of the variables of knowledge and interest in stopping smoking in the two health promotion methods, namely video media and interactive dialogue. Data was analyzed using Wilcoxon and Mann-Whitney test. The average difference between the two types of health promotion is compared and analyzed. There is a difference in the average value of interest in quitting smoking between health promotion through video media and interactive dialogue, where the average interest in quitting smoking in interactive dialogue is greater (7.4) compared to video media (7.2). The same thing was also found in adolescent smoking knowledge, where after health promotion was carried out through interactive dialogue, the mean value of knowledge was higher (43.5) compared to the average value after health promotion through video (42.7). However, after the significance test was conducted, there were no significant differences both in the mean of knowledge (p-value = 0.15) and in the interest in quitting smoking (p-value = 0.21). The results of this study are in line with research conducted by Panjaitan, who

found that respondents who received health promotion through active discussion had a better rate of knowledge and attitude compared to groups who received health promotion through video media²⁶.

The group's knowledge and smoking cessation interest that received the interactive dialogue treatment had a higher mean value compared to the group with video media. This difference can be caused by the fact that learning through dialogue involves more active respondents, meaning that psychomotor aspects can strengthen cognition so as to form better attitudes. By providing the opportunity for respondents to be more active in the health promotion process, the knowledge gained can last longer and is difficult to forget. In addition, the question and answer process involved in interactive dialogue provides two-way communication, something that is not shared by health promotion with video media. One-way communication is more likely to make teenagers forget more quickly, because it seems that learning is not something that seems interesting.

4. Conclusion

Health promotion through video media significantly increases the knowledge about the dangers of smoking and the interest in quitting teenage smoking. Health promotion through interactive dialogue significantly increases knowledge about the dangers of smoking and interest in quitting smoking. There is an effectiveness of health promotion through video media and interactive dialogue on the knowledge and interest in stopping smoking in young smokers in Palembang before and after giving health promotion.

The mean value of knowledge and interest in quitting smoking among adolescents who received health promotion by interactive dialogue was higher than for adolescents who received health promotion



through video. But health promotion through interactive dialogue is no more effective than health promotion through video.

6. References

1. WHO.2009. NMH Fact Sheet: Tobacco. (Online), (https://www.who.int/nmh/publications/fact_sheet_tobacco_en.pdf, Diakses pada 16 September 2019)
2. Kasman, Kasman & Noorhidayah, Noorhidayah & Persada, Kasuma. (2017). STUDI EKSPERIMEN PENGGUNAAN MEDIA LEAFLET DAN VIDEO BAHAYA MEROKOK PADA REMAJA. *Jurnal Publikasi Kesehatan Masyarakat Indonesia*. 4. 10.20527/jpkmi.v4i2.3842
3. Talhout, R., Schulz, T., Florek, E., van Benthem, J., Wester, P. dan Opperhuizen, A. Hazardous Compounds in Tobacco Smoke. *International Journal of Environmental Research and Public Health*. 2011; 8: 613-628
4. Aditama, T. Y. Global Youth Tobacco Survey (GYTS) Indonesia Report, 2014. In: World Health Organization, Regional Office for South-East Asia. (ed.). Indonesia. 2015.
5. WHO. 2019. Don't Let Tobacco Take Your Breath Away. (Online). (<https://www.who.int/news-room/fact-sheets/detail/tobacco> Diakses 16 September 2019). (2)
6. WHO. 2015. WHO global report on trends in prevalence of tobacco smoking 2015 (Online), (http://apps.who.int/iris/bitstream/10665/156262/1/9789241564922_eng.pdf?ua=1, Diakses 16 September 2019).
7. Kementerian Kesehatan RI. HTTS 2016: Suarakan Kebenaran, Jangan Bunuh Dirimu Dengan Candu Rokok. 2016. (Online), (<http://www.depkes.go.id/article/print/16060300002/htts-2016-suarakan-kebenaran-jangan-bunuh-dirimu-dengan-candu-rokok.html>, Diakses 16 September 2019)
8. Ratna, Kesehatan Remaja Problem dan Solusinya. Jakarta: Salemba Medika. 2016.
9. Kathryn, Konseling Remaja Pendekatan Proaktif Untuk Anak Muda. Yogyakarta: Pustaka Pelajar. 2011.
10. Pusat Data dan Informasi Kementerian Kesehatan RI. Perilaku Merokok Masyarakat Indonesia. In: Kementerian Kesehatan RI (ed.). Jakarta: Kementerian Kesehatan RI. 2013.
11. Notoatmodjo, S. Ilmu Perilaku Kesehatan. Jakarta : PT Rineka Cipta. 2010; (11)
12. Effendi,O,U, Ilmu Teori dan Filsafat Komunikasi. Bandung: PT. Citra Aditya Bakti. 2011.
13. Ratna, Kesehatan Remaja Problem dan Solusinya. Jakarta: Salemba Medika. 2016
14. Ikhsan, M PENGARUH PENDIDIKAN KESEHATAN BAHAYA MEROKOK TERHADAP PERILAKU MENGURANGI KONSUMSI ROKOK PADA REMAJA (Studi Kasus di Dukuh Telogorejo). *Jurnal Ilmu Keperawatan dan Kebidanan*. 2013; 20.
15. Firmansyah, Andan & Jahidin, Ahid & Najamuddin, Nur. Efektivitas Penyuluhan Dengan Menggunakan Media Leaflet Dan Video Bahasa Daerah Terhadap Pengetahuan Bahaya Rokok Pada Remaja. *Bina Generasi : Jurnal Kesehatan*. 2019; 11: 80-86. 10.35907/jksbg.v11i1.138.
16. Ode, E.O. Impact of Audio-Visual (AVs) Resources on Teaching and Learning in Some Selected Private Secondary Schools in Makurdi. *International Journal of Research in Humanities, Arts and Literature (IMPACT:IJRHAL)*. ISSN (E). 2014; 2321-



- 8878; ISSN (P): 2347-4564. Vol. 2, Issue 5, May 2014, 195-202@Impact Journals
17. Yessy, IAL. Pengaruh Pendidikan Kesehatan Dengan Media Audiovisual Terhadap Sikap Pengendalian Merokok Pada Remaja Di Smp Pgri Kecamatan Ambulu Kabupaten Jember. UMJ. 2016.
 18. Rahmah, M, Huriati, H, Arbianingsih. Perbedaan Efektivitas Pendidikan Kesehatan Media Facebook Dan Media Leaflet Terhadap Motivasi Berhenti Merokok Pada Remaja. JOIN. 2018; 3(1).
 19. Fitrika, Lailatul Pengaruh Media Audio Visual Terhadap Intensi Berhenti Merokok Pada Remaja Berbasis Theory Planned Behavior. Undergraduate thesis, Stikes Insan Cendekia Medika Jombang. 2018.
 20. Hamida, K, Siti, Mutalizamah. Efektifitas Penyuluhan Gizi dengan Media Komik untuk Meningkatkan Pengetahuan tentang Keamanan Makanan Jajanan Sekolah Siswa Sekolah Dasar. Jurnal Kesmas, Unnes. 2012; 8(1): 69-76.
 21. Bachtiar, Muhammad Yusuf and , Arina Maliya, S.Kep.,M.Si., Med. and , Dewi Suryandari, S.Kep., Ns. Perbedaan Pengetahuan Pada Pendidikan Kesehatan Metode Ceramah Dan Media Leaflet Dengan Metode Ceramah Dan Media Video Tentang Bahaya Merokok Di SMK Kasatrian Solo. Skripsi thesis, Universitas Muhammadiyah Surakarta. 2015.
 22. Alfarisy, S, Agrina, Lestari,W. Efektifitas pendidikan kesehatan terhadap peningkatan pengetahuan remaja tentang dampak merokok. JOM. 2014; 1(1): 49.
 23. Yuliana, Delli & Sutisna, Iyos. Pengaruh Pendidikan Kesehatan Ceramah Terhadap Tingkat Pengetahuan Remaja Tentang Kesehatan Reproduksi Di Smp Negeri 2 Tanjungsari Sumedang. Jurnal Keperawatan Komprehensif. 2017; 3: 45. 10.33755/jkk.v3i1.84.
 24. Santoso, Budi Pengaruh Pendidikan Kesehatan Terhadap Sikap Berhenti Merokok Pada Remaja Laki-Laki Di Dusun Sidoarum Godean Sleman Yogyakarta. Skripsi thesis, Universitas 'Aisyiyah Yogyakarta. 2019; 51.
 25. Ikhsan, H. Pengaruh Pendidikan Kesehatan Bahaya Merokok Terhadap Perilaku Mengurangi Konsumsi Rokok Pada Remaja (Studi Kasus Di Dukuh Kluweng Desa Kejambon Kecamatan Taman Kabupaten Pemalang). STIKES Telogorejo. 2013; 2.
 26. Panjaitan, Arip & Widagdo, Laksmono & Prabamurti, Priyadi. Intervensi Ceramah Video dan Ceramah Diskusi terhadap Pengetahuan dan Sikap Remaja dalam Kesehatan Reproduksi. Jurnal Promosi Kesehatan Indonesia. 2018; 14: 40. 10.14710/jpki.14.1.40-52.
 27. Ridha, A. Motivasi Melalui Layanan Pesan Singkat Telepon Seluler Pada Perilaku Merokok: Studi di Universitas Muhammadiyah Pontianak. Jurnal Berita Kedokteran Masyarakat. 2013; 28(1): 1-8
 28. Ardini, & Hendriani. Proses Berhenti Merokok Secara Mandiri pada Mantan Pecandu Rokok dalam Usia Dewasa Awal. Jurnal Psikologi Pendidikan dan Perkembangan. 2012; 1(02).

