
The Effect Of Health Promotion With Social Media Tiktok On Increasing Knowledge And Attitude Change In Preventing Hypertension Early On In Adolescents In Smk Negeri 1 Jambi City

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Abstract

Hypertension is a non-communicable disease whose prevalence is increasing, including among adolescents. Low knowledge and preventive attitudes are factors that contribute to the high incidence. Social media, especially TikTok, as a platform favored by adolescents, can be used as an effective and attractive health promotion media. This study used a pre-experimental design with a one group pretest posttest approach. The sample consisted of 95 students of SMK Negeri 1 Kota Jambi who were selected using a purposive sampling technique. The intervention was carried out through the delivery of educational videos about hypertension through the TikTok platform. Data collection was carried out using a knowledge and attitude questionnaire given before and after the intervention. Data analysis used Wilcoxon signed rank tests. The results of the analysis showed a significant increase in the knowledge and attitude scores of respondents after being given educational intervention through TikTok with a p-value <0.05. This shows that the use of TikTok social media is effective in increasing knowledge and forming positive attitudes of adolescents in preventing hypertension early on. Health promotion through TikTok social media has proven effective in increasing knowledge and changing adolescent attitudes towards early prevention of hypertension. TikTok's interactive and easily accessible media is a relevant and interesting educational tool for adolescents, so it can be used as an innovative health promotion strategy in efforts to prevent non-communicable diseases such as hypertension.

Keywords: Hypertension, Health Promotion, Tiktok, Knowledge, attitude, adolescents.

INTRODUCTION

The World Health Organization (WHO) in 2023 defined hypertension (high blood pressure) as a medical condition that occurs when the pressure in the blood vessels is equal to or more than 140/90 mmHg. The condition is common in everyone, but it can become serious if not treated immediately. According to the Ministry of Health of the Republic of Indonesia (Kemenkes RI) in 2023, hypertension occurs when the blood pressure on the artery walls increases too high constantly. Hypertension can increase the risk of heart disease, stroke, kidney disease, vascular disease, and other health problems. Data from the World Health Organization (WHO) in 2015 showed that around 1.13 billion people in the world have hypertension, meaning that 1 in 3 people in the world are diagnosed with hypertension and it is estimated that by 2025 there will be 1.5 billion people affected by hypertension or an estimated 9.4 million people die each year due to hypertension and its complications. Hypertension with complications (5.3%) is the 5th leading cause of death in all ages.

Based on Riskesdas 2018 data, the prevalence of hypertension based on measurement results in the population aged ≥ 18 years was 34.1%, the highest in South Kalimantan (44.1%), while the lowest in Papua was (22.2%). Hypertension occurs in the age group 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%). Based on data from the Jambi Provincial Health Profile, the prevalence of hypertension in Jambi Province has fluctuated, namely in 2015 (13.89%), 2016 (13.69%) 2017 (14.47%), 2018 (13.50%), and 2019 (18.50%) and hypertension is in 1st or 2nd place in the top 10 diseases. In 2021, hypertension was the disease with the highest total cases in Jambi Province, with 153,627 cases or 31.70%. Based on the Jambi City Health Office report, the number of hypertension cases in Jambi City in 2021 was 25,846 cases, in 2022 it decreased to 7,032 cases and

in 2023 it increased to 32,092 cases. Puskesmas Simpang IV Sipin is the health center that has the highest number of hypertension cases in 2023 with 6,673 cases and in 2024 with 3,940 cases.

One of the efforts to support government policies in preventing hypertension is to provide early health promotion education to adolescents about hypertension through social media. Health promotion education through social media in the form of videos according to Kurniatin, 2022, is more interesting and more effective. Counseling with video media has a stronger influence on the level of adolescent health knowledge³. Researchers are interested in conducting health promotion to adolescents using Tiktok social media where the content of the video discusses the definition of hypertension, disease complications, risk factors and prevention of hypertension. According to this background, researchers are interested in conducting research on the effect of health promotion with Tiktok social media on increasing knowledge and changing attitudes in preventing hypertension early on in adolescents at SMK Negeri 1 Jambi City.

RESEARCH METHODS

This research is a quantitative study using a Quasi-experiment research design with a one group pretest-posttest design. This research was conducted in March-April 2025 at SMK Negeri 1 Jambi City. The population in this study were all students of SMK Negeri Jambi City, totaling 1,813 people. The sample in this study was 95 people who were obtained from the results of calculations using the slovin formula.

RESULTS AND DISCUSSION

Univariate Analysis

Table 1 Frequency Distribution of Knowledge Before and After being given Tiktok Video Media about Hypertension in Students of SMK Negeri 1 Jambi City

Variable	N	Mean	Std. Deviation	Min.	Max.
Prior Knowledge	95	5.55	0.860	4	7
Knowledge After	95	8.62	1.054	7	10

Based on table 1, it is found that the mean knowledge of respondents before being given intervention through tiktok video media is 5.55 with a standard deviation of 0.860, the lowest value is 4 and the highest value is 7. Meanwhile, the mean knowledge of respondents after being given intervention through tiktok video media is 8.62 with a standard deviation of 1.054, the lowest value is 7 and the highest value is 10.

Table 2 Frequency Distribution of Attitudes Before and After being given Tiktok Video Media about Hypertension to Students of SMK Negeri 1 Jambi City

Variable	N	Mean	Std. Deviation	Min.	Max.
Attitude Before	95	22.31	3.452	17	34
Attitude After	95	35.40	3.227	30	40

Based on table 2, it is obtained that the attitude score before the intervention is 22.31 and after the intervention is 35.40 with a standard deviation before 3.452 and after 3.227 of 95 respondents who were given Tiktok video media about hypertension.

Bivariate Analysis

Table 3 Frequency distribution of the effect of knowledge before and after being given tiktok video media

Variable	N	Mean	Mean Rank	Mean Difference	P-value
Before Intervention	95	5.55	48,00	3,07	0,00
After Intervention	95	8.62			

Based on table 3, the results of the knowledge data test using the Wilcoxon signed rank test obtained a p-value = 0.00 <0.05 with a confidence level of 95%, so H_a is accepted, meaning that there is an effect of tiktok video media on increasing knowledge about hypertension in adolescents at SMK Negeri 1 Jambi City.

Table 4 Frequency distribution of attitude influence before and after being given tiktok video media

Variable	N	Mean	Mean Rank	Mean Difference	P-value
Before Intervention	95	22,31	48,00	13,09	0,00
After Intervention	95	35,40			

Table 4 shows that the results of attitude data using the Wilcoxon signed rank test obtained a p-value = 0.00 <0.05 with a confidence level of 95% H_a is accepted, meaning that there is a change in the attitude of students of SMK Negeri 1 Jambi City after health promotion through tiktok video media.

Discussion

The Effect of Health Promotion with Tiktok Video Media on Increasing Knowledge of Students of SMK Negeri 1 Jambi City

Based on the results of the study through the Wilcoxon signed rank test statistical test conducted, there was a significant difference between students' knowledge scores before and after the intervention. This shows that health education content delivered through Tiktok can increase student understanding. The results of the frequency distribution of knowledge from 95 respondents increased knowledge before the intervention, namely 5.55 and after the intervention, namely 8.62. the results of the knowledge data test using the Wilcoxon Signed Rank Test obtained a p-value = 0.00 <0.05 using a confidence level of 95%, so H_a is accepted, meaning that there is an influence before and after the intervention.

The results of this study are in line with research conducted by Rika Rahayu, Irawan Danismaya, and Arfatul Makiyah (2024) on the effect of tiktok platform media education on the knowledge of hypertension sufferers in the Cireunghas Puskesmas work area with the results of the Paired Sample Test test, namely p-value = 0.00 <0.05, meaning that there is an effect of tiktok platform media education on the knowledge of hypertension sufferers in the Cireunghas Puskesmas work area.

Based on the results of the research that has been conducted, it can be concluded that there is an effect of providing health promotion using tiktok video media on increasing knowledge in students at SMK Negeri 1 Jambi City.

The Effect of Health Promotion with Tiktok Video Media on Changes in Attitudes of Students of SMK Negeri 1 Jambi City

The results of the analysis showed that the average value of student attitudes before education was in the moderate category, and increased to the good category after education. The results of the attitude frequency distribution of 95 respondents showed a change in attitude before the intervention, namely 22.31 and after the intervention, namely 35.40. the results of the knowledge data test using the Wilcoxon signed rank test obtained a p-value = 0.00 <0.05 using a confidence level of 95%, so H_a is accepted, indicating that there is a significant difference between students' attitudes before and after being given health promotion through the Tiktok video. Thus, it can be concluded that health promotion through Tiktok video media has a significant effect on changing students' attitudes in efforts to prevent hypertension early.

In line with this, research by Indahsari, Wicaksono, and Adriana (2023) also shows that Tiktok media is effective in delivering health messages to adolescents. Education delivered through short and interactive video content can increase students' attention and involvement, so that they more easily understand and accept the messages conveyed.

It can be concluded that health promotion through Tiktok video media is an effective method in influencing student attitudes, especially in preventing hypertension from an early age. This is important considering that hypertension does not only attack adults, but is now starting to be found in adolescents due to unhealthy lifestyles.

Effectiveness of Tiktok Social Media as a Health Promotion Media

Tiktok has become a very popular platform among adolescents, offering engaging short videos with interactive features such as music, visual effects, and challenges that can increase user engagement. These characteristics make TikTok a potential medium for use in health promotion, especially in delivering information that is easy for adolescents to understand and remember.

This finding is in line with the results of research by Wahono et al. (2022) which showed that TikTok is an effective social media used as a means of health promotion. In Wahono's study, it was found that health education content presented in the form of short, creative, and interactive videos on TikTok was able to attract the attention of adolescents and increase their interest in receiving health information.

The effectiveness of TikTok as a health promotion media can also be explained through the social learning theory proposed by Bandura, which states that individuals can learn through observation and imitation of models displayed in the media. Thus, educational content presented through TikTok can influence adolescents' knowledge and attitudes towards certain health issues⁶.

The selection of media that is in accordance with the characteristics of the target audience is an important factor in the success of health promotion. TikTok, as a platform favored by teenagers, provides a great opportunity for health workers to conduct innovative, creative, and targeted educational interventions. By utilizing this platform, health information can be conveyed in a more interesting and easy-to-understand way, so as to increase adolescents' knowledge and awareness of health issues such as hypertension.

CONCLUSION

The results of research at SMK Negeri 1 Jambi City are that there is an effect on increasing knowledge and changing the attitudes of adolescents after being given an intervention in the form of tiktok video media about hypertension.

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