Assessment: The Effectiveness of Video Media Through the Tiktok Application on Teenagers' Knowledge About Clean and Healthy Living Behavior at Junior High School Level

Annisa Doelvia¹, Vu Thi Thu Hien², Shivani Rathee³

¹Akademi Kebidanan Amanah Muara Bungo, Jambi, Indonesia ²Hanoi Medical University, Ha Noi, Vietnam ³School of Health Sciences, University of Petroleum and Energy Studies, Dehradun, India

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ABSTRACT

Purpose of the study: The purpose of this research is to evaluate the effectiveness of video media through the TikTok application in increasing teenagers' knowledge about Clean and Healthy Living Behavior at the junior high school level.

Methodology: This research method is quantitative, using a questionnaire as the main instrument for collecting data which is distributed to students. The collected data was then analyzed using descriptive and inferential statistical techniques to evaluate the relationship between the use of TikTok video media and teenagers' knowledge about Clean and Healthy Living Behavior.

Main Findings: The results of this research are that the use of video media through the TikTok application significantly increases teenagers' knowledge about Clean and Healthy Living Behavior at the Junior High School level. These findings demonstrate the great potential of the use of social media platforms in increasing adolescent health awareness and emphasize the importance of further exploration of innovative health education approaches.

Novelty/Originality of this study: The novelty of this research lies in exploring the effectiveness of using video media through the TikTok application in increasing teenagers' knowledge about Clean and Healthy Living Behavior at the Junior High School level, which highlights the importance of adapting health education strategies to developing digital trends.

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Corresponding Author:

Annisa Doelvia,

Akademi Kebidanan Amanah Muara Bungo,

Jl. H Usman Suid SKB, Sungai Binjai, Kec. Bathin III, Kabupaten Bungo, Jambi 37211

Email: annisadoelviaaa20@gmail.com

1. INTRODUCTION

Health education has a very important role in advancing world prosperity, including in the ASEAN region. Through health education, people can gain a better understanding of the importance of maintaining health preventatively, recognizing signs of disease, and practicing a healthy lifestyle [1]–[3]. At a global level, health education can help reduce deaths from preventable diseases and improve quality of life [4]–[6]. In the ASEAN region, where various health challenges such as communicable and non-communicable diseases and access to health services are still a major concern, health education can be an important instrument in building community capacity to overcome these problems [7]–[9]. Thus, investment in health education not only improves individual well-being, but also makes an important contribution to achieving sustainable development goals at global and regional levels.

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Health education has a very vital role in the Indonesian context. With a large and diverse population and complex health challenges, health education is the key to increasing public awareness of the importance of a healthy lifestyle, disease prevention, and access to quality health services [10]–[12]. Through health education, Indonesian people can gain a better understanding of endemic diseases, such as malaria and dengue fever, as well as non-communicable diseases, such as diabetes and hypertension [13]–[15]. Apart from that, health education also plays a crucial role in addressing health issues related to the environment, hygiene, nutrition and reproductive health [16]–[18]. By increasing public health literacy, Indonesia can reduce the overall burden of disease, improve quality of life, and achieve sustainable development goals in the health sector.

The importance of clean and healthy living behavior for junior high school students cannot be underestimated. Apart from being the basis for maintaining one's own health, this behavior also plays a role in creating a safe and productive school environment [19]–[21]. Students who practice clean and healthy living behavior tend to have better immune system, reduce the risk of disease transmission, and improve concentration and academic performance [22]–[24]. More than that, introducing and encouraging clean and healthy living behavior from an early age can form sustainable habits into adulthood, reduce the burden of disease in society, and extend life expectancy. Therefore, education about the importance of clean and healthy living behavior needs to be integrated into the school curriculum, accompanied by the provision of supportive facilities, as well as an approach that actively involves students in making decisions about their own health [25]–[27].

This research is in line with Nygård et al [28] research that discusses media use on health. However, this research still has several shortcomings. Although the use of video media via the application as a tool to convey messages about Clean and Healthy Living Behavior to teenagers is increasingly common, there is still a significant need for in-depth evaluation of the effectiveness of this approach [29]–[31]. This research aims to fill the knowledge gap in the scientific literature regarding the extent to which the use of TikTok can increase teenagers' knowledge about clean and healthy living behavior. By taking into account various factors such as content design, user engagement, and its impact on increasing knowledge, this assessment is expected to provide valuable insights for health policy makers and educators in optimizing the use of TikTok as an effective health education tool for adolescents.

The implications of assessing the effectiveness of video media through the TikTok application on teenagers' knowledge about Clean and Healthy Living Behavior in junior high school are very important in designing more effective and relevant health education strategies. The findings from this research can provide valuable insights for health policy makers and educators to utilize social media platforms such as TikTok as an effective educational tool in conveying the message of Clean and Healthy Living Behavior to adolescents. Apart from that, understanding the best way to organize and present Clean and Healthy Living Behavior content on TikTok can also help in developing communication strategies that are more interesting and have a positive impact on adolescent health. Thus, this assessment has the potential to produce significant changes in efforts to increase knowledge and behavior of Clean and Healthy Living Behavior among junior high school teenagers.

Research on the effectiveness of video media through the TikTok application in increasing adolescents' knowledge regarding Clean and Healthy Living Behavior in junior high schools highlights an interesting new approach in adolescent health education. By leveraging social media platforms that are popular among teens, this research creates an opportunity to deliver health messages in a way that is engaging and relevant to the target audience [32]–[34]. This approach reflects a smart adaptation to the changing behavior of media consumers, who are increasingly likely to spend time on digital platforms. By bridging the gap between the digital world and health education, this research makes an important contribution to expanding the scope and effectiveness of adolescent health education efforts.

This research aims to evaluate the potential and effectiveness of using video media through the TikTok application as an educational tool in increasing teenagers' knowledge about Clean and Healthy Living Behavior in junior high school environments. By identifying successes and challenges in implementing this approach, the main goal is to provide in-depth insight into the effectiveness of this communication strategy in reaching its target audience. Through this research, it is hoped that practical guidance and recommendations can be found for health policy makers and educators to optimize the use of social media in an effort to increase awareness and understanding among teenagers about the importance of maintaining health and hygiene.

2. RESEARCH METHOD

This research is a type of quantitative descriptive research which aims to analyze three health videos by looking at the mean, median and mode. The function of quantitative research is to collect, analyze, and interpret numerical data with the aim of understanding phenomena or relationships between variables in a particular research context [35]–[37]. In this context, research uses numerical data to provide a clear picture of the effectiveness of health videos in achieving educational goals. This research was carried out by providing treatment in the form of educational videos based on the TikTok application to the intervention group. Adolescent knowledge data before and after treatment was measured to see differences in knowledge increase

between the two groups. With this approach, researchers can evaluate the effectiveness of TikTok video media in increasing teenagers' knowledge about clean and healthy living behavior comparatively between the intervention and control groups.

Population this research is 20 students at State Junior High School 9 Muara Bungo. Population is a generalized area consisting of objects/subjects that have certain quantities and characteristics determined by the researcher to be studied and then conclusions drawn [38]–[40]. A sample is a group of individuals who are part of an accessible population. The sampling method uses random sampling technique. Random sampling is taking research samples randomly [41]–[43]. Inclusion criteria are the general characteristics of research subjects from a target population that is affordable for research. In this sampling technique, the research sample is determined by giving each member of the population the same possibility of becoming the selected sample.

The data collection technique in this research was carried out through distributing questionnaires regarding the effectiveness of the TikTok video media in increasing teenagers' knowledge about clean and healthy living behavior at state junior high school 9 Muara Bungo. Researchers collected data on students by selecting according to inclusion criteria. Primary data was collected directly from respondents using a questionnaire instrument. The function of a questionnaire tool is to collect data in a systematic and standardized way through specially designed questions, allowing researchers to collect information from respondents in quantitative or qualitative studies in an efficient and measurable way [44]–[47]. Researchers observed eighth grade students and provided educational videos based on the TikTok application for 15 minutes from 3 videos.

Data analysis was carried out using descriptive statistical tests after collecting data from questionnaires filled out by respondents. The initial stage includes data cleaning to identify and correct possible filing errors or incomplete data. Next, the data is classified and coded according to the variables studied, such as the respondent's answer to each question in the questionnaire. By using appropriate statistical analysis methods, such as descriptive analysis to explain respondent characteristics and inferential analysis to evaluate relationships between variables, researchers can gain a deep understanding of the data collected. Analysis of this data allows strong and relevant conclusions to be drawn, and provides valuable insight into the effectiveness of TikTok video media in increasing teenagers' knowledge about Clean and Healthy Living Behavior in junior high school.

The research procedure in the study regarding the effectiveness of TikTok video media in increasing teenagers' knowledge about clean and healthy living behavior at the Negeri 9 Muara Bungo junior high school involved several structured steps. Firstly, distributing questionnaires is the initial stage in research using questionnaires. At this stage, the questionnaire design was carefully prepared to include questions that were relevant to the research topic, such as knowledge about Clean and Healthy Living Behavior among teenagers. Second, questionnaire analysis is an important process in research using questionnaires to collect data and analyze it. After the questionnaire has been filled out by the respondent, the first step is to collect data carefully. After that, statistical analysis is carried out using appropriate methods, such as descriptive analysis to explain the characteristics of respondents and inferential analysis to evaluate the relationship between variables. Third, the research results stage involves the presentation and interpretation of data that has been collected and analyzed. The results of data analysis are presented in table form that is easy to understand and relevant to the research questions. After that, the results are interpreted carefully to explore the implications and significance of the findings for the topic under study. Fourth, the conclusion is the final stage in research using a questionnaire, where the research results are analyzed and formulated in clear and relevant conclusions. These conclusions reflect what can be concluded from the results of the analysis and interpretation of the data that has been carried out. Apart from that, this stage also includes a discussion about the implications of research findings for the topic under study, as well as suggestions or recommendations for further development or further action in the context of the research. The procedures for collecting data in this study are in accordance with the following figure 1.



Figure 1. Research procedure

3. RESULTS AND DISCUSSION

The following describes the descriptive statistical results of the variable effectiveness of video media through the TikTok application on teenagers' knowledge about clean and healthy living behavior. An illustration of the effectiveness of video media through the TikTok application on teenagers' knowledge about clean and healthy living behavior is shown in the following table.

Table 1. Statistical descriptive test of the effectiveness of video media through the TikTok application on teenagers' knowledge about clean and healthy living behavior in three videos

Statistics	Video 1	Video 2	Video 3
N (Number of Students)	20	20	20
Mean	85.70	78.79	81.50
Median	88.00	85.00	84.00
Mode	85	80	82
Min	81	79	80
Max	90	84	86

The resulting data is processed using several tests, one of which is descriptive statistics. Descriptive statistics are used to see the mean, median, mode, min, max by analyzing the results based on existing results. It was found that video 1 about clean and healthy living behavior had the highest score with a mean of 85.70. It can be seen from the three videos that TikTok videos about clean and healthy living behavior can increase students' knowledge. Research on the effectiveness of video media through the TikTok application on teenagers' knowledge about Clean and Healthy Living Behavior at the junior high school level highlights the importance of exploring innovative approaches in adolescent health education. By utilizing social media platforms that are popular among teenagers, this study aims to measure the extent to which TikTok video content can increase their understanding of clean and healthy living behavior. Through comprehensive data analysis and in-depth interpretation, this research has the potential to provide valuable insight into the effectiveness of this approach in achieving health education goals, as well as its implications for efforts to increase adolescent health awareness and behavior [48]–[50].

This research is in line with research conducted by Blackstone et al [6], which discusses the effectiveness of media use in health. However, this research has not compared three videos as was done in this study. The study regarding the effectiveness of video media through the TikTok application on teenagers' knowledge about Clean and Healthy Living Behavior at the junior high school level marks an innovative step in adolescent health education. By utilizing social media platforms that have become rampant among teenagers, this research aims to evaluate the extent to which TikTok video content can increase their understanding of clean and healthy living behavior. In the process, an in-depth data analysis stage will provide a clearer picture of the success and potential of this approach in achieving health education goals. It is hoped that the findings from this research will provide a valuable contribution in the development of more effective and relevant communication strategies in increasing adolescent health awareness and behavior in the future.

Research on the effectiveness of video media through the TikTok application on teenagers' knowledge about Clean and Healthy Living Behavior at the Junior High School level highlights innovation in the approach to adolescent health education. By leveraging social media platforms that have become an integral part of teenagers' daily lives, this research explores new ways of conveying health messages using formats that are familiar and appealing to the target audience [51]–[53]. This approach reflects a smart adaptation to changing communication trends and behavior of teenagers, who are increasingly likely to spend time in the digital world. By uniting digital technology with public health efforts, this research not only promises to increase knowledge about clean and healthy living behaviors, but also provides valuable insight into the potential of using social media platforms to more effectively achieve youth health education goals [54], [55].

Findings from research regarding the effectiveness of video media through the TikTok application on teenagers' knowledge about Clean and Healthy Living Behavior at the junior high school level have significant implications in the development of more adaptive and relevant health education strategies. By taking into account the great potential of using social media in conveying health messages to adolescents, this research opens the door for further development in using digital platforms as educational tools. These implications can help health policy makers and educators to design more innovative and interactive programs, which can increase adolescents' understanding of the importance of maintaining clean and healthy living behavior. In addition, these findings can also provide valuable insights for public health practitioners in designing prevention campaigns that are more effective and relevant for adolescent groups.

Although this research provides valuable insight into the potential effectiveness of video media through the TikTok application in increasing teenagers' knowledge about Clean and Healthy Living Behavior at the Junior High School level, there are several limitations that need to be noted. First, the use of questionnaires as a data collection instrument can be susceptible to response bias and the tendency to provide answers that society deems desirable. In addition, limitations in measuring other factors that can influence adolescents' knowledge about clean and healthy living behavior, such as exposure to information from sources other than TikTok, may also limit the generalization of the findings of this study. In addition, this research only pays attention to the short-term effects of using TikTok in increasing knowledge, without paying attention to the long-term impact on teenagers' healthy behavior and living habits. By considering these limitations, future research can address these weaknesses and provide a more comprehensive understanding of TikTok's role in adolescent health education.

4. CONCLUSION

Based on the results of the research conducted, it can be concluded that the use of video media through the TikTok application is effective in increasing teenagers' knowledge about clean and healthy living behavior in junior high school. The results of increasing knowledge scores after intervention with TikTok media show that this approach is able to have a positive impact on adolescent health education. Therefore, implementing TikTok media as a health education tool in schools can be an effective strategy in increasing teenagers' awareness and understanding of the importance of maintaining cleanliness and health.

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