

The Effectiveness Of Picture Book Media On The Danger Of Smoking as an Effort To Prevent Smoking Behavior in Junior High School Age Adolescents

Rheyna Leony¹, Puspita Sari^{2*}, Silvia Mawarti Perdana³, Asparian Asparian⁴,
M.Ridwan⁵

¹⁻⁵Public Health, Jambi University, Jambi, Indonesia

rheynaleony@gmail.com¹, puspita.sari@unja.ac.id^{2*}, silviamp@unja.ac.id³, asparian@unja.ac.id⁴,
fkm.ridwan@unja.ac.id⁵

Author Correspondence: puspita.sari@unja.ac.id*

Abstract. Background: Smoking is a habit that is difficult to stop. The smoking habit has been found in various age groups ranging from adults to children. Jambi Province ranks 16th in the category of smoking habits in the age group of more than 10 years. This is a factor due to the lack of delivery of education using interesting and innovative media to teenagers. This research aims to determine the effectiveness of picture book media interventions for adolescent children, especially at SMPN 18 Jambi City. Method: The type of research used is Quasi Experimental using a one group pre-test post-test design with a sample size of 30 people. The technique used in sampling is probability sampling where samples are taken randomly to ensure that the entire population has the same opportunity to become a sample. Samples were taken using a simple random sampling technique and the data will be analyzed using the paired sample t-test statistical test. Results: There was an effect of picture book media intervention on the knowledge and attitudes of students at SMPN 18 Jambi City, a value was obtained ($p=0.000 < 0.005$) for each variable. It can be concluded that picture book media is effective as an intervention tool in increasing knowledge and changing attitudes among students at SMPN 18 Jambi City. Conclusion: Picture book media has an influence on the knowledge and attitudes of students at SMPN 18 Jambi City.

Keywords: Cigarettes, Picture Book Media, Knowledge, Attitudes

1. INTRODUCTION

The World Health Organization (WHO) report published in 2023 states that worldwide, tobacco has caused the death of more than 8.7 million people due to active use such as smoking and chewing, while passive consumers, or those affected by secondhand smoke exposure, account for approximately 1.2 million deaths.(WHO Report 2023). According to WHO data, Indonesia is classified as a low-income country, along with 48 other countries worldwide. WHO predicts that the prevalence of smokers in Indonesia will continue to rise, reaching 90 million people, or 45% of the population, by 2025 (World Health Organization, 2020). Indonesia is one of the countries that has not yet ratified the WHO Framework Convention on Tobacco Control (WHO FCTC), which has a significant impact on smoking prevalence in the country, with a relatively high percentage of about 33.8%, including 12.8% among young smokers.(Azhar Muslim et al., 2023)

Indonesian Health Survey (SKI) 2023 who's conducted by the Ministry of Health (Kemenkes) shows that the number of active smokers is estimated to reach 70 million people, with 7.4% of them being smokers aged 10-18 years.(Kebijakan Pembangunan et al., 2023) This

is supported by the statement from the 2019 Global Youth Tobacco Survey (GYTS), which reported that in Indonesia, 57.8% of students were exposed to cigarette smoke at home, and 66.2% were exposed to cigarette smoke in public places, reflecting the influence of both family and social environments on adolescent smoking behavior. The GYTS also noted an increase in the smoking prevalence among students aged 13-15 over the past five years, rising from 18.3% to 19.2%. (Global Youth Tobacco Survey Indonesia, 2019)

Riskesdas provinsi Jambi, reports that 3.28% of schoolchildren smoke daily, while 2.04% smoke occasionally. The average number of cigarette sticks smoked daily among individuals aged 10 years and older in Jambi City is 15.69%, with an average of 16.52% across 11 districts/cities in Jambi Province. This average indicates that the daily smoking prevalence in Jambi City is relatively high (Riskesdas, 2018). In terms of smoking habits among individuals aged 10 years and older in Jambi Province, 21.2% are active daily smokers, placing Jambi in 16th position nationally. (Irfan & Iksaruddin, 2022)

As an effort to improve the quality of the younger generation, the ban on smoking among adolescents is a measure that must be implemented. This can be achieved through health promotion, which aims to educate as an alternative method of providing information by transferring knowledge to students. Health promotion is carried out both individually and collectively to enhance the capacity and awareness of the community, especially the youth, in maintaining and improving their health. In the teaching and learning environment, health promotion is conducted to achieve a balance between the environment, behavior, and individuals in order to foster healthy behavior change. (Anwar et al., 2022)

In line with the research conducted by Arsyad, the importance of media in the delivery of knowledge and learning can effectively convey messages that encourage an efficient learning process in accordance with the objectives. In line with Mayer's cognitive theory of multimedia learning, it is stated that learning with engaging images can result in 89% of students being more creative compared to learning with words alone. Daryanto also asserts that students are more interested in images, colors, and visualizations, whether in realistic or cartoon form. (Suparman et al., 2020)

Picture storybooks are an effective health promotion media used as an educational tool to enhance knowledge among adolescents. Therefore, Nurdiyatullah Dahlan conducted a study with students of SMPN 23 Makassar to test the effectiveness of providing career information through picture books to improve students' understanding. The results of the study showed a significant improvement in students' understanding of career information services. (Dahlan, 2015)

Meliana Yuli Kartika et al. (2023) conducted an intervention using a picture book media with the theme of disaster mitigation, titled "SIAGA." The results of the study showed that the picture book provided a unique, engaging, and interesting representation of disaster events, which elicited a positive response and made students more attracted to the material. (Kartika et al., 2023) his aligns with the function of visual media as a tool to capture attention, helping students focus more on the content of the learning process. (Kustandi & Darmawan, 2020) In this study, the delivery of information was done using a picture book, and the aim of this research was to assess the effectiveness of a picture book on the dangers of smoking as a preventive effort to discourage smoking behavior among adolescent students in SMPN 18 Jambi City.

The researcher conducted a preliminary survey at SMPN 18 Jambi City by observing and interviewing the school staff and the curriculum head as stakeholders. During this opportunity, the researcher asked several questions related to smoking behavior and juvenile delinquency at the school. The results showed that the school had implemented a smoke-free school policy, with students acknowledging that the school should be a smoke-free environment. However, despite this, students still smoked outside of class hours and after school. This indicates that students refrain from smoking not because of personal awareness but rather due to the school's rules.

The Jambi City Education Office also stated that, out of the 62 Junior High Schools (SMP) in Jambi City, SMPN 18 ranks 11th as the school with the highest number of male students. This correlates with the data on the proportion of smoking behavior based on gender, where it was found that 66% of males smoke, compared to 6.7% of females. Among adolescents, 38.4% of male teenagers smoke, while only 0.9% of female teenagers do. This statement highlights the need to pay closer attention to the number of male smokers, with the support of school staff and parents to provide proper guidance to students according to their needs and age. (Sholihah & Novita, 2021)

2. LITERATURE REVIEW

According to the Indonesian Government Regulation No. 19 of 2003, tobacco is a product made from processed tobacco that can be consumed, including cigars and other forms. It is derived from *Nicotiana Tobacum*, *Nicotiana Rustica*, and other materials containing synthetic nicotine and tar. (Peraturan Pemerintah Republik Indonesia, 2003) here are 4,000 toxic compounds found solely in cigarette smoke and tobacco. The toxic components in cigarettes can damage cells in the body and are extremely harmful to health. In addition, the

substances in cigarettes are carcinogenic and can trigger cancer.(Siregar & Rambe, 2020) according to WHO, tobacco-related deaths are expected to reach 10 million annually in various developing countries, including Indonesia. This means that approximately 70% of deaths are caused by tobacco, with the number of adolescent smokers continuing to rise. Consequently, tobacco could kill around 650 million people.(Naresawari et al., 2020)

According to the Ministry of Health of the Republic of Indonesia, active smoking can lead to various chronic diseases such as lung cancer, stroke, chronic obstructive pulmonary disease, coronary heart disease, vascular disorders, decreased fertility, increased incidence of ectopic pregnancy, fetal growth disturbances, seizures during pregnancy, impaired immunity in infants, and higher perinatal mortality. In addition, passive smoking is equally dangerous.(Kementrian Kesehatan RI & Redaksi Sehat Negeriku, 2013) Active smokers are those who directly consume tobacco through smoking or chewing at least one cigarette or a portion of it. A person can be categorized as an active smoker if they have ever tried and consumed a cigarette, leading to a sense of dependence. Active smokers can be classified into three categories based on the number of cigarettes they smoke daily: moderate smokers, heavy smokers, and chronic smokers. Meanwhile, passive smokers are individuals who inhale and receive tobacco residues or cigarette smoke produced by active smokers, whether intentionally or unintentionally. A person is categorized as a passive smoker when they do not smoke themselves but inhale secondhand smoke from their surrounding environment.(Jamal et al., 2020)

According to Kristina, factors that can shape a person's behavior include personal experiences, others, culture, mass media, educational institutions, religious institutions, and emotional factors.(Chusniah Rachmawati & Promosi Kesehatan Dan, 2019) According to Notoatmodjo (2010), there are three main factors in individual and group behavior change: facilitating factors, enabling factors, and reinforcing factors.(Jamal et al., 2020) Zakiyatun, in Farida's study, reveals that adolescent smoking is influenced by both external and internal factors. Internal factors that influence smoking behavior include gender, personality, occupation, and beliefs. Meanwhile, external factors that can affect smoking behavior include the living environment, social influences or peer groups, climate, cigarette advertising, the absence of policies and regulations, lack of knowledge, and the attitudes of healthcare professionals toward health promotion. Furthermore, the most significant factors influencing adolescent smoking behavior are psychological satisfaction, parental influence, and peer pressure.(Sholihah & Novita, 2021b)

According to Heinich (2009), media is a tool for delivering and channeling information. Media is significantly related to a message and method, especially in the learning process. In other words, media is a component of learning resources or a physical medium containing instructional material within the student's environment that can stimulate students to learn. (Yanti & Kresnadi, 2018) According to Rhodathul (2009), as developments progress, educational media types are categorized based on their usage and characteristics, including: by their physical form, by their devices, by the sensory channels they engage, by their working mechanism, by their nature, and by their target user group. (S. Susanti et al., 2022)

Meliana Yuli Kartika, dkk (2023) conducted an intervention using a picture book media with the theme of disaster mitigation, titled "SIAGA." The results of the study showed that the picture book provided a unique, engaging, and interesting representation of disaster events. This generated a positive response and made students more engaged. (Kartika et al., 2023) his aligns with the function of visual media as a tool to capture attention, helping students concentrate more on the content of the learning process. (Kustandi & Darmawan, 2020)

In addition, a study on the effectiveness of picture book media was also conducted by A.A Istri Mas Padmiswari et al. (2022), who developed a picture book media with the theme of "Balanced Nutrition." The results of the study indicated that the picture book media had a significant impact on increasing balanced nutrition knowledge among children aged 10-12 years. (Padmiswari et al., 2022)

Picture book media was also used by Indri Ardiyanti Saleh, dkk. (2020) to educate about COVID-19 prevention behaviors. The results of the study showed that the use of picture books had a significant impact, as it provided explanations that were easy to understand and left a lasting impression on each page, making it easier for students to comprehend and remember the lessons. (Saleh et al., 2021)

3. METHODS

This study is a descriptive quantitative research with a quasi-experimental approach, applying a one-group pretest-posttest design. This means the research will be conducted on a small group randomly selected. The study will be measured using a pretest as the initial stage before the intervention and a posttest conducted after the intervention. The sampling technique used for each class in this study is probability sampling, where the entire population has an equal chance of being selected as a sample. The sample determination is done using the simple random sampling technique, with 30 participants chosen as the sample. (R. Susanti, 2019) The statistical test to be used in this study is the Kolmogorov-Smirnov test. If the data is in the

interval scale and follows a normal distribution, a paired t-test will be conducted to compare the results before and after the experiment.

4. RESULT

Distribution of the influence of picture book media intervention on students' knowledge

Table 1. Effect of Picture Book Media Intervention on Knowledge

Variabel	N	Mean	SD	Pvalue
Pengetahuan				
Sebelum Intervensi	30	78,33	13,23	0,000
Setelah Intervensi	30	90,00	4,59	

In Table 1, it can be seen that the average knowledge of students before the intervention using picture book media was 78.33 with a standard deviation of 13.23. After the picture book media intervention, the average knowledge score increased to 90.00 with a standard deviation of 4.59. The difference in the average scores between the first and second measurements is 11.67. The statistical test revealed a p-value of $0.000 < 0.05$, indicating a significant effect on students' knowledge after the picture book media intervention.

Distribution of the influence of picture book media intervention on student attitudes

Table 2. Effect of Picture Book Media Intervention on Attitudes

Variabel	N	Mean	SD	Pvalue
Sikap				
Sebelum Intervensi	30	78,33	8,58	0,000
Sesudah Intervensi	30	92,08	7,28	

Based on Table 2, it is shown that the average attitude score of students before the intervention using picture book media was 78.33 with a standard deviation of 9.52. After the second measurement, following the intervention of the picture book media on the dangers of smoking, the average score increased to 92.08 with a standard deviation of 7.28. There is a noticeable difference in the average scores between the first and second measurements of 13.75. The statistical test results show a p-value of $0.000 < 0.05$, indicating a significant difference in students' attitudes before and after the picture book media intervention.

5. DISCUSSION

The Effectiveness of Picture Book Media on Students' Knowledge About the Dangers of Smoking for Health

Based on the research findings regarding the effectiveness of picture book media on knowledge levels, the following results were obtained. The study shows an increase in knowledge, with a p-value (sig) of $0.000 < 0.05$. Among the 30 respondents, at the time of the

pre-test, 20 individuals were categorized into the knowledge interval group of more than 75%, representing 66.7%. Nine individuals were categorized into the knowledge interval group of 56-75%, representing 30%, and one individual fell into the knowledge interval group of less than 56%, representing 3.3%. Meanwhile, after the post-test, all respondents fell into the knowledge interval group of more than 75%, representing 100%. It can be concluded that the use of picture book media has an impact on the knowledge of students at SMPN 18 Jambi City. The study also showed that the average knowledge score before the intervention using picture book media was 78.33, while after the intervention, the students' average knowledge score increased to 90.00.

The picture book media used as an intervention tool and resource was sourced from the Directorate of Non-Communicable Disease Prevention and Control, Ministry of Health, and was published in September 2017 on the official website www.p2ptm.kemendes.go.id. Based on the observations made by the researcher during the study, it was found that when the picture book intervention was conducted with the students, the response was positive. The students appeared enthusiastic about reading and understanding each image and narrative in the picture book.

The development and provision of appropriate media will influence the effectiveness of delivering health information and knowledge transfer. Media types and formats are varied, not only in written form but also in other forms such as picture stories presented in books. In a study conducted by Istri Mas Padmiswari A et al. (2022), it was stated that the average knowledge level of schoolchildren improved after an educational intervention using books and picture stories.(Istri Mas Padmiswari et al., 2022)

In a study by Nur Diana Aprilia et al. (2020), the conclusion highlighted that picture book media was effective in conveying information about the learning message, as evidenced by the improvement in pre-test and post-test scores after the intervention. Additionally, picture book media was found to be easy to accept and effective in capturing students' attention.(Aprilia & Mindaudah, 2020)

A similar study was also conducted by Niakurniawati et al. (2023) on the use of picture book media in teaching proper tooth brushing practices. The research design used a quasi-experimental approach. The results showed a significant difference in the average scores of the intervention group before and after the picture book media intervention about proper tooth brushing practices. A significant value of 0.000 ($p < 0.05$) was found, indicating that the picture book media had an effective influence on tooth brushing practices. This suggests that picture

book media can be an effective tool for behavior and action change in the intervention group.(Niakurniawati et al., 2023)

This is in line with the current study, where the health promotion media used to address the dangers of smoking behavior is picture book media. Picture books are effective in attracting the target audience to read, as readers will focus not only on the text but also on the engaging images. The advantage of picture books is that they can stand alone with the images and illustrations they contain, without the need for a storyteller.(Resmisari & Shalsabilla, 2022)

Dalam Riset Kesehatan Dasar (Riskesdas) In 2013, it was reported that smoking behavior among adolescents tended to increase year by year. This is due to the developmental stage of adolescence, where young people are often curious about new things, including smoking. Therefore, health promotion activities in schools about the dangers of smoking should use an approach that aligns with the habits of schoolchildren.(Irfan & Iksaruddin, 2022) The delivery of information or health promotion must be continuous for children. As such, specific strategies are needed to capture children's attention and prevent boredom. Media plays a crucial role in delivering information effectively. Media serves as a tool for conveying information. The development and provision of appropriate media will influence the effectiveness of health information dissemination and knowledge transfer.

Knowledge is the result of questioning or receiving information obtained by an individual after interacting with an object. Knowledge can be acquired through visual and auditory sensory processes, and it can also be received through both formal and non-formal education. Knowledge has six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. In practice, good knowledge is usually gained from factors such as education, information, environment, and experience. However, among all these, the knowledge acquired through education is the most effective, as the higher the level of education, the easier it is for a person to accept and understand the knowledge and information they receive.(Dian Petricia Sekeronej et al., 2020)

The Effectiveness of Picture Book Media on Students' Attitudes About the Dangers of Smoking for Health

Based on the results of the research on the effectiveness of picture book media on students' attitudes toward the dangers of smoking to health, the findings are as follows. The statistical test yielded a p-value (sig) of $(0.000) < 0.05$. The results of the statistical test in this study indicate that the use of picture book media about the dangers of smoking had an effect on the attitudes of students at SMPN 18 Jambi City. The average attitude score before the

intervention using picture books was 78.33, which increased to 92.08 after the intervention with picture book media. Attitude is a response shown by an individual toward something that can stimulate their thoughts and feelings. It can also be described as an action with a specific motive.(Notoatmodjo, 2012) In line with the research conducted by Julaecha, dkk, it is stated that the attitude toward smoking among adolescents has two poles: negative and positive. These attitudes are influenced by several factors, including experience, parental influence, and the fact that some adolescents may still have a positive attitude toward the dangers or effects of smoking but continue to smoke. This could be due to many factors affecting attitude, such as experience, idol influences, mass media, educational institutions, religion, environment, and emotional influences.(Julaecha & Wuryandari, 2021)

Regarding the safety of substances containing addictive chemicals in tobacco products, it is prohibited for minors to consume tobacco products. It is stated that tobacco product sellers are prohibited from providing such products to children under the age of 18 and to pregnant women. However, despite this, the rate of underage smoking in Indonesia remains high. This attitude is linked to smoking behavior, which is influenced by various supporting factors. The findings of this study are consistent with research conducted by Muhammad Gerry Oxa et al. (2022), which found that the majority of respondents agreed that smoking causes harm and other negative consequences.(Gerry Oxa et al., 2022)

This study also aligns with the findings of research conducted by Niakurniawati et al., which stated that an intervention using picture books on the proper practice of tooth brushing improved students' attitudes toward proper brushing techniques. Picture books can illustrate the correct way to brush teeth with simple language and engaging images that are easy to understand.(Niakurniawati et al., 2023)

In a study conducted by Eleni Tympa et al. (2021) on the effect of picture book intervention on healthy eating habits, 50 children were selected as a sample using random sampling, divided into two groups: a control group and an intervention group. The intervention lasted for 2 weeks to improve children's behavior regarding daily consumption of healthy foods. The results showed a p-value smaller than 0.05, indicating that the effect of picture books on children's healthy eating habits was significant. Similarly, the consumption of sweet foods also showed a p-value smaller than 0.05, meaning that the pattern of sweet food consumption in children was also influenced by the picture book intervention.(Tympa & Karavida, 2021)

6. CONCLUSION

Based on the research findings and discussion regarding the effectiveness of picture books about the dangers of smoking for students at SMPN 18 in Jambi City, the following conclusions can be drawn:

- a) Picture books are suitable to be used as a medium for disseminating information and promoting the prevention of smoking behavior among middle school students at SMPN 18 in Jambi City.
- b) Picture books are effective in significantly improving understanding and attitudes among students at SMPN 18 in Jambi City, with a p-value of 0.000 ($P \text{ value} < 0.05$).
- c) Picture books are effective in increasing knowledge about the dangers of smoking to health among adolescent students, particularly at SMPN 18 in Jambi City.

LIMITATION

In this study, the researcher acknowledges that there were several limitations and constraints during the research process, including the following:

1. The study was conducted at only one location, SMPN 18 in Jambi City, with the sample representing only a small portion of the population. As a result, the findings of the research only cover a small scale among the entire population of adolescent students at the middle school level in Jambi City.
2. During the study, the measurements were taken on a single day. This may have affected the results, as there is a possibility that the students were not in a stable physical or mental state at the time of the measurement.

REFERENCES

- Anwar, Y., Nababan, D., & Tarigan, F. L. (2022). Faktor yang mempengaruhi perilaku merokok pada remaja di Desa Tawar Sedenge Kecamatan Bandar Kabupaten Bener Meriah. *Journal of Healthcare Technology and Medicine*, 7(2).
- Aprilia, N. D., & Mindaudah, M. (2020). Pengembangan media buku bergambar berbasis alam dalam pembelajaran keterampilan menulis puisi kelas III Sekolah Dasar Negeri 1 Grogol Diwek Jombang. *SASTRANESIA: Jurnal Program Studi Pendidikan Bahasa dan Sastra Indonesia*, 7(3), 66. <https://doi.org/10.32682/sastranesia.v7i3.1387>
- Azhar Muslim, N., Adi, S., Puspita Ratih, S., & Nurnaningsih Herya Ulfah, D. (2023). Determinan perilaku merokok remaja SMA/ sederajat di Kecamatan Lowokwaru Kota Malang. *Indonesian Journal of Health Promotion and Behavior*, 5(1), 20–28. <https://doi.org/10.47034/ppk.v4i2.6781>

- Chusniah Rachmawati, W., & Promosi Kesehatan Dan, Mk. (2019). Promosi kesehatan dan ilmu perilaku. <https://fik.um.ac.id/wp-content/uploads/2020/10/2.-PROMOSI-KESEHATAN-DAN-ILMU-PERILAKU.pdf>
- Dahlan, N. (2015). Efektivitas informasi karir dengan media buku bergambar untuk meningkatkan pemahaman studi lanjutan siswa. *Jurnal Psikologi Pendidikan & Konselin*, 1(1).
- Dian Petricia Sekeronej, A. F. Saija, & N. E. Kailola. (2020). Tingkat pengetahuan dan sikap tentang perilaku merokok pada remaja di SMK Negeri 3 Ambon Tahun 2019. Volume 2, Nomor 1.
- Gerry Oxa, M., Hendrata Prasanti, N., Ratna Kusumo, A., Izzah, I., Nur Azizah, A., Fanisya Purnama, D., Nur Fadhilah, S., Dwi Ningtyas, R., Rizqi Amaliah, W., Karina Tantri, P., Izzatul Hikmah, H., & Yuda, A. (2022). Identifikasi hubungan pengetahuan, sikap, dan perilaku merokok pada anak di bawah umur di Indonesia. *Jurnal Farmasi Komunitas*, 9(1).
- Global Youth Tobacco Survey Indonesia. (2019). GYTS | Global Youth Tobacco Survey lembar informasi Indonesia 2019. [https://www.who.int/docs/default-source/searo/indonesia/indonesia-gyts-2019-factsheet-\(ages-13-15\)-\(final\)-indonesian-final.pdf?sfvrsn=b99e597b_2](https://www.who.int/docs/default-source/searo/indonesia/indonesia-gyts-2019-factsheet-(ages-13-15)-(final)-indonesian-final.pdf?sfvrsn=b99e597b_2)
- Irfan, A., & Iksaruddin, I. (2022). Efektifitas permainan ular tangga untuk meningkatkan pengetahuan tentang bahaya rokok pada siswa SMP di Kota Jambi. *Jurnal Ilmu Kesehatan Masyarakat Berkala*, 4(2), 94–101.
- Istri Mas Padmiswari, A., Treesna Wulansari, N., Wayan Sukma Antari, N., & Studi Sarjana Teknologi Pangan, P. (2022). Efektivitas edukasi gizi seimbang melalui media buku cerita bergambar. *Jurnal Riset Kesehatan Nasional*, 19. <https://ejournal.itekes-bali.ac.id/jrkn>
- Jamal, H., Abdullah, A. Z., & Abdullah, M. T. (2020). Determinan sosial perilaku merokok pelajar di Indonesia: Analisis data global youth tobacco survey tahun 2014. *Jurnal Kesehatan Vokasional*, 5(3), 141–150.
- Julaecha, J., & Wuryandari, A. G. (2021). Pengetahuan dan sikap tentang perilaku merokok pada remaja. *Jurnal Akademika Baiturrahim Jambi*, 10(2), 313. <https://doi.org/10.36565/jab.v10i2.337>
- Kartika, M. Y., Ardhyantama, V., & Tisngati, U. (2023). Pengembangan media buku cerita bergambar untuk meningkatkan pemahaman anak tentang mitigasi bencana. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, 13(1), 76–86. <https://doi.org/10.24246/j.js.2023.v13.i1.p76-86>
- Kebijakan Pembangunan, B., Kementerian, K., & Ri, K. (2023). Dalam Angka Tim Penyusun SKI 2023 Dalam Angka Kementerian Kesehatan Republik Indonesia.
- Kementrian Kesehatan RI, & Redaksi Sehat Negeriku. (2013). Tanya jawab: Perokok remaja dan bahayanya. Redaksi Sehat Negeriku. <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20131105/219083/tanya-jawab-perokok-remaja-dan-bahayanya/>

- Kustandi, C., & Darmawan, D. (2020). Pengembangan media pembelajaran: Konsep & aplikasi pengembangan media pembelajaran bagi pendidik di sekolah dan masyarakat. Prenada Media.
- Naresawari, A. D., Wijayanti, E., Oktaviani, F. I., & Santoso, A. P. A. (2020). Analisis pengguna rokok di masa pandemi COVID-19 di Kecamatan Nogosari. Prosiding Seminar Nasional Hukum, Bisnis, Sains Dan Teknologi, 1, 72.
- Niakurniawati, N., Imran, H., Nasri, N., & Wilis, R. (2023). Penggunaan media buku bergambar SOGI (menggosok gigi) dalam praktik menggosok gigi yang benar pada murid kelas V MIN 13 Aceh Besar. Jurnal PADE: Pengabdian & Edukasi, 5(2), 75. <https://doi.org/10.30867/pade.v5i2.1475>
- Notoatmodjo, S. (2012). Promosi kesehatan dan perilaku kesehatan. Rineka Cipta.
- Padmiswari, A. A. I. M., Wulansari, N. T., & Antari, N. W. S. (2022). Efektivitas edukasi gizi seimbang melalui media buku cerita bergambar. Jurnal Riset Kesehatan Nasional, 6(1), 19–24. <https://doi.org/10.37294/jrkn.v6i1.359>
- Peraturan Pemerintah Republik Indonesia. (2003). Peraturan Pemerintah No. 19 Tahun 2003. <https://peraturan.bpk.go.id/Details/52180/pp-no-19-tahun-2003>
- Resmisari, G., & Shalsabilla, R. I. (2022). Visual storytelling dalam mengenalkan gangguan sleep paralysis melalui picture book untuk anak (Studi Kasus Buku “Berpetualang ke Dunia Tidur bersama Molly dan Peri Lunora”). REKA MAKNA: Jurnal Komunikasi Visual, 2(2), 83–92.
- Riskesdas. (2018). Laporan Riskesdas Jambi 2018. Kemenkes RI, 1–473. <https://repository.badankebijakan.kemkes.go.id/id/eprint/4667/1/Laporan%20Riskesdas%20Jambi%202018.pdf>
- Saleh, I. A., Andi Asrina, & Idris, F. P. (2021). Pengaruh edukasi melalui buku cerita bergambar terhadap perilaku pencegahan COVID-19 pada siswa SD di Kabupaten Maros Tahun 2020. Journal of Aafiyah Health Research (JAHR), 2(1), 84–90. <https://doi.org/10.52103/jahr.v2i1.528>
- Sholihah, H., & Novita, A. (2021a). Hubungan persepsi, pengaruh teman sebaya dan dukungan keluarga dengan perilaku merokok remaja laki-laki. Journal of Public Health Education, 1(01), 20–29. <https://doi.org/10.53801/jphe.v1i01.14>
- Sholihah, H., & Novita, A. (2021b). Hubungan persepsi, pengaruh teman sebaya dan dukungan keluarga dengan perilaku merokok remaja laki-laki. Journal of Public Health Education, 1(01), 20–29. <https://doi.org/10.53801/jphe.v1i01.14>
- Siregar, R. J., & Rambe, N. Y. (2020). Penyuluhan tentang bahaya merokok pada pria di Desa Sorimaon Kec. Batang Angkola Muaratais Kab. Tapanuli Selatan Tahun 2020. Jurnal Pengabdian Masyarakat Aufa (JPMA), 2(3), 59–66.
- Suparman, I. W., Eliyanti, M., & Hermawati, E. (2020). Pengaruh penyajian materi dalam bentuk media komik terhadap minat baca dan hasil belajar. Pedagogi: Jurnal Penelitian Pendidikan, 7(1).

- Susanti, R. (2019). Sampling dalam penelitian pendidikan. *Jurnal Teknodik*, 187–208.
<https://doi.org/10.32550/teknodik.v0i0.543>
- Susanti, S., Dewi, P. I. A., Saputra, N., Dewi, A. K., Wulandari, F., Kusumawardan, R. N., Bahtiar, I. R., & Sholeh, M. (2022). *Desain media pembelajaran SD/MI*. Yayasan Penerbit Muhammad Zaini.
- Tympa, E., & Karavida, V. (2021). Picture books and healthy eating habits: An intervention study in a Greek preschool setting. *European Journal of Education Studies*, 8(4).
<https://doi.org/10.46827/ejes.v8i4.3680>
- WHO report on the global tobacco epidemic, 2023. Protect people from tobacco smoke fresh and alive. (2023).
- World Health Organization. (2020). Tobacco fact sheet: Key facts.
<https://www.who.int/docs/default-source/campaigns-and-initiatives/world-no-tobacco-day-2020/wntd-tobacco-fact-sheet.pdf>
- Yanti, V., & Kresnadi, H. (2018). Meningkatkan hasil belajar dengan media realia pada pembelajaran IPA kelas IV SDN10 Senegak. *Jurnal Pendidikan*.