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# The Effectiveness of Health Promotion Using Social Media on Adolescents' Knowledge of HIV/AIDS

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**ABSTRACT**

*This study aims to determine the effectiveness of health promotion through social media in increasing adolescents' knowledge about HIV/AIDS. The sample consisted of 75 senior high school students selected using purposive sampling based on specific criteria. Data collection was conducted through pre-test and post-test questionnaires administered before and after the intervention within a specified time period. Bivariate analysis using paired t-tests showed that there was a significant increase in adolescents' awareness of HIV after the health promotion intervention via social media, with the average score increasing from 56.4 to 78.9 (p 0.001). In practical terms, the results of this study recommend that health promotion programmes among adolescents integrate social media as the main platform for delivering educational messages, paying attention to content quality, visual appeal, and interactive engagement.*

***Keywords:*** *HIV/AIDS, Youth, Social Media, Health Promotion, Knowledge*

## INTRODUCTION

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) remain serious public health issues in Indonesia, as they do throughout the world. HIV/AIDS cases in Indonesia continue to increase year on year, with approximately 564,000 people living with HIV (PLHIV) in 2025, although only 63% are aware of their infection status. Of these, 67% are already undergoing antiretroviral therapy (ART), but only 55% have achieved viral load suppression, meaning the virus is undetectable and the risk of transmission is very low (Triwahyuni et al., 2023).

HIV/AIDS not only affects the physical health of individuals, but also has complex social, psychological, and economic consequences. The social impact experienced by people living with HIV/AIDS includes stigma and discrimination from family, community, and even health workers, which causes them to often hide their status and experience social isolation. Psychologically, patients


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experience disorders such as denial, depression, anxiety, stress, and suicidal thoughts, which are exacerbated by a lack of family and social support (Salmi, 2023).

The increase in HIV/AIDS cases in Indonesia is particularly evident among adolescents aged 15–24, who are a productive group and play a major role in the nation's development. Data from the Indonesian Ministry of Health shows an increase in cases in recent years in several regions, with the main contributing factors being a lack of knowledge and education about HIV, risky sexual behaviour, and limited access to HIV-related health services (Zaqie Maulana et al., 2024). Unfortunately, this exploration is often done without adequate knowledge about the risks of sexually transmitted diseases, including HIV/AIDS. This is exacerbated by the lack of comprehensive sex education in schools and families.

The inability of adolescents to access accurate reproductive health information, coupled with a lack of open communication about reproductive health issues, does indeed make them highly vulnerable to HIV/AIDS transmission. Adolescents tend to seek information from easily accessible sources such as the internet and social media, which often present inaccurate or unreliable content. Therefore, effective reproductive health education interventions are crucial (Zari & Soedirham, 2022).

Formal education about HIV/AIDS in schools faces several obstacles, including limited and text-based teaching materials, as well as one-way teaching methods without active student participation. This is not in line with the learning characteristics of adolescents, who prefer visual, interactive, and contextual approaches. Education using a one-way lecture method without the use of interesting or interactive media tends to be less effective in improving adolescents' knowledge and attitudes about HIV/AIDS (Ismail et al., 2023).

A more effective approach involves the use of audiovisual media such as educational videos, animations, and interactive presentations that can attract adolescents' attention. In addition, group discussion methods, Focus Group Discussions (FGDs), peer education, and the use of social media have been proven to increase adolescent active participation and understanding. This participatory approach not only increases knowledge but also reduces stigma against people with HIV/AIDS (Siagian, 2023).

In their daily lives, Indonesian adolescents are very familiar with various digital platforms such as Instagram, TikTok, and WhatsApp. The latest data from 2025 shows that around 48 per cent of internet users in Indonesia are adolescents under the age of 18, with an average internet usage of more than 5 hours per day. The most popular platforms among adolescents are TikTok, Instagram, and YouTube Shorts, which provide short video content that is very appealing to them. These social media platforms are not only used for entertainment and communication, but also as the main means for adolescents to search for information, including information related to health and sex life (Saroinsong et al., 2024).

The characteristics of social media, which are fast, visual, and wide-reaching, are highly relevant to the needs and interests of adolescents in the digital age. Teenagers are very interested in short and interesting content, so platforms such as Instagram, TikTok, and WhatsApp are their favourites because they provide interactive and easily accessible video and image content formats.

Health messages that are packaged in an interesting and informative way through social media can be an effective strategy to increase teenagers' knowledge and awareness of the dangers of HIV/AIDS and the importance of early prevention (Rahayuningtyas et al., 2025).

Various recent studies have shown that social media has significant potential in increasing public knowledge about health issues, including HIV/AIDS. For example, a meta-analysis by Rizka Ayu Setyani, Ari Natalia Probandari, and Eti Poncorini Pamungkasari (2024) found that digital media-based interventions increased HIV testing rates among adolescents by almost 1.9-fold compared to the control group ($p < 0.00001$). The study analyzed four randomized controlled trials that took place in the United States, the United Kingdom and China from 2013-2023, showing that digital media is effective in triggering real preventive measures such as HIV testing.

Local Studies in Indonesia also support the findings. A study by Harahap et al. (2024) in Bukittinggi found that there is a significant correlation between the use of social media and knowledge of HIV/AIDS among high school students (ⓐ=0.614; $p < 0.001$). These findings indicate that social media not only expands access to information, but also directly affects adolescents ' attitudes and understanding of HIV/AIDS.

At the global level, a systematic review by Bolin Cao, Somya Gupta, Weiming Tang, and Team (2017) found that social media interventions—such as online community campaigns, self—test kit deployments, and educational content–elicited significant increases in HIV test requests (RR = 1.50-1.64). These researchers emphasize the importance of an interactive and community-oriented approach in maximizing the impact of health education through social media.

Nevertheless, the effectiveness of social media as a health education tool is still a topic of debate. Several studies have shown that despite the increase in knowledge, the information that adolescents obtain from social media is often superficial or even misleading. This is due to the high volume of unvalidated content and the potential to spread myths or stigma about HIV/AIDS. Without adequate controls, social media can become a source of disinformation that worsens teens ' understanding and attitudes toward the issue.

Therefore, a planned and theory-based communication strategy is needed in designing health messages on social media. This approach is important so that the information presented is not only true and accurate, but also interesting, understandable and able to positively influence behavior. The use of health communication theories such as Information-Motivation-Behavioral Skills (IMB) or Health Action Process Approach (HAPA) can help design more structured and effective interventions. Thus, health promotion through social media is not only a discourse, but also a real effort that has measurable impact in increasing knowledge and awareness of adolescents against HIV/AIDS.

Theoretically, the Information-Motivation-Behavioral Skills (IMB) model developed by Fisher and Fisher became one of the widely used frameworks in HIV/AIDS prevention interventions. The IMB Model emphasizes that changes in health behavior depend not only on the delivery of information, but also on the motivation of the individual and the skills possessed to implement the desired behavior. Accurate and relevant information is an important initial foundation for building a correct understanding of the risks of HIV/AIDS and how to prevent it.

In addition to Information, strong motivation is also a key component in the IMB model. These motivations include personal drives to maintain one's own health and social influences that support healthy behavior. Without sufficient motivation, the information provided will not promote significant changes in behavior. Furthermore, behavioral skills, such as the ability to use condoms correctly or perform an HIV test independently, are essential to ensure that individuals are able to apply their knowledge and intentions into effective concrete actions.

The Health Action Process Approach (HAPA) approach also makes an important contribution to the understanding of health behavior change processes. This Model highlights the systematic planning stage in the formation of intentions and the implementation of health measures. HAPA divides the change process into two main phases, the motivation phase and the volitional phase, which includes action planning and self-control. The integration of these two models in the design of health promotion campaigns through social media can increase the effectiveness of interventions by ensuring that the messages delivered are not only informative, but also motivating and equipping adolescents with the practical skills needed to prevent HIV/AIDS in a sustainable manner.

However, there is still little research in Indonesia that empirically examines the effectiveness of health promotion through social media to increase adolescent knowledge about HIV/AIDS with a measurable quantitative approach. Therefore, this study is important to provide scientific evidence of the potential of social media as an educational medium in the Prevention of HIV/AIDS among adolescents.

## METHODS

This study uses a quantitative approach with a pretest-posttest quasi-experimental research design without a control group. This method was chosen to measure the change in the level of knowledge of adolescents about HIV / AIDS after receiving interventions in the form of health promotion through social media. The use of this design allows the researcher to observe the effect of the intervention directly on a predetermined sample group.

The sample in this study consisted of 75 senior high school students selected using purposive sampling based on specific criteria. The inclusion criteria for this study were: (1) students aged between 15 and 18 years old, (2) active users of social media for at least the past six months, and (3) willing to participate by signing an informed consent form. Meanwhile, exclusion criteria included students who were absent during the intervention, did not complete the questionnaire, or withdrew before the study ended.

Data collection was conducted through pre-test and post-test questionnaires administered before and after the intervention within a specified time period. The questionnaire contained closed-ended questions that measured three main aspects, namely basic knowledge about HIV/AIDS, modes of transmission and prevention, and attitudes towards people living with HIV/AIDS.

Before being used in the main study, the questionnaire instrument underwent validity and reliability tests to ensure the reliability and accuracy of the measuring instrument. The validity test was conducted using Pearson Product Moment correlation between item scores and total scores, and

the results showed that all items had a calculated r value greater than the table r ($p < 0.05$), thus declaring them valid. Furthermore, the reliability test was conducted using Cronbach's Alpha method, and the $\alpha$ value obtained was 0.87, indicating that the questionnaire had a very good level of internal consistency (because $\alpha > 0.70$). Thus, the research instrument was declared suitable for use in measuring changes in students' knowledge and attitudes towards HIV/AIDS before and after the intervention.

Health promotion interventions are implemented through popular social media platforms among teenagers, such as Instagram and WhatsApp. Educational content presented in the form of short videos, infographics, and interactive quizzes designed based on the theory of Information-Motivation-Behavioral Skills (IMB) and Health Action Process Approach (HAPA). Data analysis was conducted using paired t-test statistical tests to determine significant differences between knowledge scores before and after the intervention. The entire research process followed the principles of research ethics by obtaining approval from the school and the written consent of the participants.

## RESULTS

### 1. Univariate Analysis

**Table 1. Variable Frequency Distribution of HIV/AIDS Knowledge (n=75)**

| Categories of Knowledge | Frequency | Percentage (%) |
|---|---|---|
| Low | 30 | 40.0 |
| Medium | 25 | 33.3 |
| High | 20 | 26.7 |
| **Total** | **75** | **100** |

From the frequency distribution table of HIV/AIDS knowledge before the intervention, it can be seen that most respondents have a low to moderate level of knowledge. As many as 40% of adolescents are in the low knowledge category, 33.3% are in the medium category, and only 26.7% have high knowledge about HIV/AIDS. This shows that in general, the level of understanding of adolescents about HIV/AIDS before getting health promotion through social media still needs to be improved.

**Table 2. Frequency Distribution of Adolescents' Knowledge Level about HIV/AIDS After Intervention (Post-Test)**

| Categories of Knowledge | Frequency | Percentage (%) |
|---|---|---|
| Low | 5 | 6,7 |
| Medium | 18 | 24,0 |
| High | 52 | 69,3 |
| **Total** | **75** | **100** |

The frequency distribution results show that after health promotion through social media, the majority of respondents (69.3%) had a high level of knowledge about HIV/AIDS. Only a small

proportion (6.7%) remained in the low category. These findings indicate that health promotion interventions have succeeded in substantially improving young people's understanding of HIV/AIDS.

**Table 3. Comparison of Adolescents' Knowledge Scores about HIV/AIDS Before and After Intervention**

| Variable | Mean | Standard deviation (SD) | *t value* | *p value* |
|---|---|---|---|---|
| Pre-intervention knowledge | 56.4 | 8.25 | 14.52 | < 0.001 |
| Post-intervention knowledge | 78.9 | 7.10 | | |

Bivariate analysis using paired t-tests showed a significant increase in adolescents' knowledge of HIV/AIDS after the health promotion intervention via social media. The average score increased from 56.4 ± 8.25 before the intervention to 78.9 ± 7.10 after the intervention, with a p-value < 0.001, indicating that the difference was statistically significant.

This increase indicates that social media-based health promotion is effective in improving adolescents' understanding of HIV/AIDS. These results are in line with previous studies by Wardhani et al. (2024) and Purwanto & Charolina (2025), which showed that digital education interventions can significantly improve adolescents' knowledge through the presentation of interesting and accessible information. These findings also reinforce the Health Belief Model (HBM) theory, which emphasises that increased perceptions of the risks and benefits of prevention can trigger more positive behavioural changes.

Thus, the results of this study provide empirical evidence that the use of social media as a means of health promotion is an effective and relevant strategy for reaching adolescents in efforts to increase their knowledge and awareness of HIV/AIDS prevention.

## DISCUSSION

### 1. Univariate Analysis

The condition of low knowledge of HIV / AIDS in adolescents is an important concern considering that adolescence is a critical phase in the formation of Health Behavior. At this stage, adolescents are particularly vulnerable to environmental influences and the information they receive, including information related to sexual and reproductive health. Therefore, lack of knowledge can potentially increase the risk of risky behaviors such as unprotected sexual intercourse, which ultimately contributes to HIV transmission. This underscores the need for structured and ongoing interventions to improve adolescents ' understanding of HIV/AIDS.

Health promotion through social media is an effective strategy for reaching adolescents due to its interactive and accessible nature. The results of the study show that prior to the intervention, adolescents' knowledge of HIV/AIDS was still low despite their active use of social media. These findings are in line with health communication theory, which states that the effectiveness of social media depends not only on access, but also on the quality and relevance of the content conveyed. Thus, the results of this study emphasise the importance of developing educational content that is

interesting and based on the needs of adolescents so that HIV/AIDS prevention messages can be conveyed optimally.

Related studies support the finding that adolescents ' knowledge of HIV/AIDS prior to intervention still needs to be improved. Study by Takaingan et al. (2018) for example, showed that health promotion carried out through social media was able to significantly increase adolescent knowledge. The results of the study confirmed that the use of digital platforms as a health education media can reach young audiences in a more attractive and accessible way, thus positively impacting their understanding of HIV/AIDS.

In addition, research conducted by Nadek et al. (2020) adds to the evidence that audiovisual media is also very effective in conveying information related to HIV/AIDS to adolescents. Through a combination of visual and audio, this media is able to convey health messages more clearly and easily understood. This is very important considering the characteristics of adolescents who are more responsive to interactive media and not monotonous. These two studies both showed statistically significant results ($p < 0.05$), which reinforces the validity of the effectiveness of social media and audiovisual media as a means of Health Promotion.

In a theoretical context, the Health Belief Model (HBM) is a highly relevant framework for understanding the dynamics of behavior change related to HIV/AIDS prevention. This theory explains that a person will take preventive action if they feel susceptible to the disease (perceived susceptibility), consider the disease serious (perceived severity), believe that the preventive measures taken are beneficial (perceived benefits), and feel the obstacles to taking such measures are minimal or insurmountable (perceived barriers). By understanding these beliefs and perceptions, health promotion interventions can be designed to be more effective in changing adolescent behavior.

The application of HBM theory in health promotion through social media and audiovisual media provides a strong foundation for the design of targeted communication strategies. For example, designed educational content should be able to raise awareness of adolescents about the risks of HIV/AIDS and the importance of preventive measures, while reducing barriers such as stigma or shame to seek more information. Thus, the combination of theoretical approaches and appropriate communication media is expected to increase the effectiveness of health promotion programs in improving knowledge and changing adolescent behavior against HIV/AIDS on an ongoing basis.

The analysis conducted by the researchers confirms that more intensive and targeted interventions are needed to increase knowledge and awareness of adolescents about HIV/AIDS. Given the use of social media is very popular among teenagers, optimal utilization of this platform can be an effective means to convey educational information. Social Media allows the spread of health messages quickly, interactively, and with a wide range, so the potential impact on improving the knowledge of adolescents is very large.

In addition, interventions that are only one-way without considering the psychological and social aspects of adolescents are likely to be less effective. Therefore, the integration of the Health Belief Model (HBM) theory approach is key in designing interventions that can promote behavior

change. By understanding how adolescents perceive the risks, benefits, and barriers associated with HIV/AIDS, communication strategies can be structured in such a way as to motivate adolescents to take appropriate preventive measures.

The right communication strategy should not only focus on delivering information, but should also pay attention to the aspect of understanding and receiving the message by the target audience. In this context, health promotion content must be tailored to the characteristics and needs of adolescents, such as using easy-to-understand language, attractive visuals, and non-judgmental delivery. A humanist and empathetic approach can help reduce stigma and increase teens ' confidence to seek information and take preventative action.

Furthermore, the interventions carried out must be sustainable and measurable in their effectiveness. Regular Monitoring and evaluation needs to be implemented to ensure that health promotion programs run really bring positive changes in adolescent knowledge and behavior. That way, any obstacles or barriers that arise during the implementation can be identified and corrected in a timely manner, so that the expected results can be achieved optimally.

Overall, the development of health promotion strategies that combine HBM theory with the use of social media as a means of communication is a promising approach in efforts to prevent the spread of HIV/AIDS among adolescents. Through planned and targeted interventions, it is hoped that adolescents ' knowledge will increase, their awareness of the risk of HIV/AIDS will be stronger, and ultimately prevention behaviors can be applied consistently. Thus, the program not only contributes to the improvement of individual health, but also helps to reduce the burden of HIV/AIDS disease in society more broadly.

**2. Comparison of Average HIV/AIDS Knowledge Score Before and After Intervention**

The effectiveness of social media in increasing the knowledge of adolescents is in line with the characteristics of its interactive and accessible use, so that it is able to attract the attention of young age groups who are active users of digital platforms. Health promotion through social media not only conveys information quickly and widely, but can also be presented in various interesting formats such as videos, infographics, and interactive quizzes that make it easier to understand the material. Thus, social media-based interventions are proving to be a relevant and effective method in efforts to increase youth knowledge and awareness regarding HIV/AIDS, which is ultimately expected to encourage behavior change towards better prevention.

This significant increase in knowledge scores is in line with other research findings that also confirm the effectiveness of social media as a health education medium. For example, a study by Takaingan et al. (2018) and Nadek et al. (2020) showed that health promotion interventions utilizing social media and audiovisual media were able to significantly increase adolescents ' knowledge and awareness of HIV/AIDS. The advantage of social media lies in its ability to reach young audiences in an interactive and accessible way, thus being able to motivate positive behavioral changes.

In the context of theory, the results of increasing knowledge about HIV / AIDS in adolescents can be understood through the framework of the Health Belief Model (HBM). This Model emphasizes that a person's behavior in maintaining his health is strongly influenced by personal

perceptions of the risks faced, especially perceptions of vulnerability (perceived susceptibility) and perceptions of the seriousness of the disease (perceived severity). As adolescents have better knowledge of HIV/AIDS, they become more aware of the possibility of contracting and the serious effects of the disease, so their perception of risk increases.

Such increased perceptions of vulnerability and seriousness play an important role in motivating adolescents to take the necessary preventive measures. In this sense, the knowledge gained through social media can change the way they view HIV/AIDS, thus encouraging them to take more conscious and responsible steps, such as using protective equipment during sexual intercourse and avoiding risky behaviors. Thus, social media not only serves as a source of information, but also as a means to form attitudes and intentions in maintaining personal health.

Therefore, the proper and targeted use of social media can be a very effective tool in improving the preparedness of adolescents to face the risk of HIV/AIDS. Through the delivery of attractive and easy-to-understand messages, social media is able to educate adolescents while changing their perception of the importance of prevention. This approach is in line with the HBM principle which emphasizes the need for changes in perception to trigger changes in behavior, so that social media can be used as a strategic Health Promotion media and have a positive impact on HIV/AIDS prevention efforts among the younger generation.

From a practical point of view, these findings confirm the importance of developing and implementing health promotion programs that integrate digital technology as the main communication medium. In today's digital age, social media is becoming a very effective platform for delivering health messages because of its ability to reach a wide audience at a relatively low cost. By utilizing digital technology, health promotion programs can be designed to be more innovative and accessible to adolescents in various regions, including areas that are difficult to reach through conventional methods.

The utilization of social media not only plays a role in increasing knowledge, but also accelerates the dissemination of information widely and in real-time. This allows educational messages about HIV/AIDS to reach more youth in less time. Such wide reach is critical to creating a collective consciousness that can support behavior change on a larger scale. In addition, social media allows for two-way interaction that makes communication more dynamic and responsive to the needs of the audience.

Furthermore, interactivity and ease of access on social media make the learning process more interesting and not boring for teenagers. Features such as short videos, interactive quizzes, and creative visual content increase teens ' interest and motivation to better absorb health information. In this way, the effectiveness of education through social media can be maximized, so that the knowledge gained can be more easily applied in everyday life and support ongoing HIV/AIDS prevention efforts.

Overall, the results of this paired t-test provide strong empirical evidence that health promotion through social media is effective in significantly increasing HIV/AIDS knowledge in adolescents. The visible increase in knowledge scores confirms that social media is not just a social communication platform, but can also be used as an educational medium that is able to reach and

influence the understanding of the younger generation at large. This is especially important given the high use of social media among teenagers today.

This finding indicates that social media is an appropriate and relevant educational media to be used in HIV/AIDS prevention programs. Through engaging and interactive content, social media can provide information more easily understood and accepted by adolescents, while encouraging positive changes in attitudes and behavior. Thus, the use of social media as part of a health promotion strategy not only increases knowledge, but can also help form a strong collective awareness of HIV/AIDS prevention.

Therefore, the development of health communication strategies based on social media is highly recommended to be widely implemented. Health promotion programs should be designed with a creative and contextual approach to fit the needs and characteristics of adolescents. In addition, periodic evaluation and monitoring needs to be done to measure the effectiveness and sustainability of interventions. Researchers suggest that relevant parties, such as health offices and educational institutions, maximize the use of social media in HIV/AIDS education programs, by involving a variety of creative and interactive content that is interesting for adolescents. In addition, training is needed for health workers and educators to be able to use digital media optimally. Further research is also suggested to explore the effectiveness of different types of social media content and platforms that are most impactful in increasing knowledge and changing adolescent behavior related to HIV/AIDS.

This study has several limitations that need to be considered when interpreting the results. First, the research design used was a quasi-experiment without a control group, so the researchers could not completely rule out the possibility of external variables influencing the increase in respondents' knowledge. Second, the limited scope of the research subjects to one secondary school in a specific region means that the results of this study cannot be generalised to the entire population of adolescents with different social and cultural characteristics.

In addition, the data collection instrument used was a closed questionnaire that relied on the honesty and understanding of the respondents to each question item, so the potential for bias in the answers remained possible. The relatively short duration of the intervention is also a limitation because it does not allow for an evaluation of the sustainability of the health promotion effects on long-term behavioural change. This study also focuses only on the aspect of knowledge, without measuring the dimensions of attitude and behaviour, even though these two aspects are important indicators in assessing the success of health promotion comprehensively.

Nevertheless, this study still provides meaningful empirical contributions by showing that the use of social media as a means of health promotion is effective in increasing adolescents' knowledge about HIV/AIDS. These results can be used as a basis for further research with a stronger design and broader coverage, so that the effectiveness of social media as a medium for health education can be evaluated more deeply and continuously.

## CONCLUSIONS

This study aims to determine the effectiveness of health promotion through social media in increasing adolescents' knowledge about HIV/AIDS. Based on the analysis results, there was a significant increase in adolescents' knowledge scores after the health promotion intervention through social media, with the average score increasing from 56.4 to 78.9 ($p < 0.001$). The majority of respondents also experienced an increase in their knowledge category from low–moderate to high after the intervention.

These findings indicate that social media is an effective and relevant tool for improving adolescents' knowledge about HIV/AIDS. Social media enables the rapid, interactive, and engaging dissemination of information, making health messages more accessible to young people. These results are consistent with the Health Belief Model (HBM) theory, which emphasises the importance of perceptions of risk and benefits in promoting health behaviour change.

In practical terms, the results of this study recommend that health promotion programmes among adolescents integrate social media as the main platform for delivering educational messages, paying attention to content quality, visual appeal, and interactive engagement. Thus, it is hoped that increased knowledge will lead to a sustainable change in attitudes and behaviours towards HIV/AIDS prevention.

## REFERENCES

Aisyah, S., Syafar, M., & Amiruddin, R. (2020). The influence of social media on increasing knowledge and attitudes of adolescents about HIV & AIDS in Parepare City. *Jurnal Kesehatan Masyarakat Maritim, 3*(1). https://doi.org/10.30597/jkmm.v3i1.10299

Ardela, M. P., et al. (2024). Effectiveness of health education using peer education and audiovisual methods on the level of knowledge of teenage girls about HIV/AIDS. *STRADA: Jurnal Ilmiah Kesehatan, 13*(1), 15–23. https://doi.org/10.30994/sjik.v13i1.1105

Ezelote, C. J., et al. (2024). Effect of peer health education intervention on HIV/AIDS knowledge amongst in-school adolescents in secondary schools in Imo State, Nigeria. *BMC Public Health, 24*, 1029. https://doi.org/10.1186/s12889-024-18536-4

Fauziah, M., & Rumaf, M. M. (2016). Intervention using social media Facebook as health education media in increasing adolescent's knowledge and attitude on HIV/AIDS. *Proceedings of the 2nd International Multidisciplinary Conference (IMC).*

Glanz, K., Rimer, B. K., & Viswanath, K. (2015). *Health behavior: Theory, research, and practice* (5th ed.). San Francisco, CA: Jossey-Bass.

Ismail, R., Syafdewiyani, & Yona, S. (2023). The Influence of Health Education About HIV in Schools in Eliminating Stigma in People with HIV/AIDS. *The Indonesia Journal of Infectious Diseases, 9*(1), 23–33. https://doi.org/10.32667/ijid.v9i1.167

Mahadewi, E. P., et al. (2025). The influence of social media on HIV/AIDS and LGBT cases among the young generation in Jakarta. *International Journal of Health and Pharmaceutical (IJHP), 5*(2), 256–262. https://doi.org/10.51601/ijhp.v5i2.384

Nadek, Y. E., Yulia, A., & Susanti, H. (2020). Effectiveness of audiovisual media on increasing adolescents' knowledge about HIV/AIDS. *JOM PSIK, 7*(2), 1–7. Retrieved from http://jom.unri.ac.id

Nindrea, R. D., Darma, I. Y., Sukma, M., Mardiah, A., Agustian, D. R., & Sholihati, M. (2024). Social media use, knowledge, and attitudes towards people living with HIV/AIDS among high school students in an Indonesian tourism region. *African Journal of Infectious Diseases, 18*(2 Suppl), 16–21.

Notoatmodjo, S. (2014). *Health promotion and health behavior.* Jakarta: Rineka Cipta.

Purwanto, & Charolina. (2025). The influence of social media on adolescents' perceptions of HIV/AIDS. *Science Midwifery, 12*(6), 1943–1950. https://doi.org/10.35335/midwifery.v12i6.1809

Rahayuningtyas, Y. P., Pratitis, N. T., & Arifiana, I. Y. (2025). Fear of Missing Out (FOMO) dan Psychological Well Being pada Remaja Pengguna Media Sosial. *JIWA: Jurnal Psikologi Indonesia*, *3*(01). https://doi.org/10.30996/jiwa.v3i01.12684

Salmi, D. N. (2023). Family Support and Social Emotional Responses in PLWHA (People with HIV/AIDS). *Healthcaring: Jurnal Ilmiah Kesehatan*, *2*(2), 8–14. https://doi.org/10.47709/healthcaring.v2i2.2519

Satriawibawa, I. W. E., Wati, K. D. K., & Widiastari, A. A. (2019). Social campaign effectively increases level of knowledge of HIV/AIDS among senior high school adolescents. *Journal of the Indonesian Medical Association*, *68*(2), 65–71.

Setyani, R. A., Probandari, A. N., & Pamungkasari, E. P. (2024). The impact of digital health interventions on HIV testing uptake among adolescents: A systematic review and meta-analysis of randomized controlled trials. *Journal of Public Health and Development*, *22*(2), 297–311. https://doi.org/10.55131/jphd/2024/220224

Takainginan, C. M. M., Awuy, V. D. O. P., & Lalu, A. (2018). The effect of health promotion on adolescents' knowledge about HIV/AIDS. *Jurnal Ilmiah Bidan, 6*(1), 45–51. Retrieved from https://ejurnal.poltekkes-manado.ac.id

Tanof, Y. H. D., Manurung, I. F. E., & Purnawan, S. (2021). Effectiveness of educational video media in increasing knowledge and attitude in recognizing the dangers of HIV/AIDS among junior high school students in Kupang City, 2020. *Journal of Health and Behavioral Science, 3*(1), 1–12. https://doi.org/10.35508/jhbs.v3i1.3016

Triwahyuni, P., Ricky, M. A., & Angie, C. (2023). Community Service Program for Prevention of HIV & AIDS Transmission with Health Promotion at the Indonesian Adventist University Campus. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, *6*(4), 1496–1506. https://doi.org/10.33024/jkpm.v6i4.9119

Ule, F., et al. (2021). Relationship between knowledge and perception of adolescents aged 15–19 years, and the stigma of PLWHA. *Media Kesehatan Masyarakat, 4*(3), Article 5020. https://doi.org/10.35508/mkm.v4i3.5020

UNAIDS. (2022). *Global HIV & AIDS statistics – Fact sheet.* Available at https://www.unaids.org

Wardhani, Y., Wijayanti, I., & Fitriani, F. (2024). Differences in knowledge about HIV/AIDS in adolescents before and after health education. *Journal of Midwifery Science: Basic and Applied Research.*

Zaqie Maulana, M. F., Hasibuan, A., & Mauliah, S. (2024). The Rise in HIV Cases Among Indonesian Youth. *Amsir Community Service Journal*, *2*(1).

Zari, A. P., & Soedirham, O. (2022). The Relationship Between Access to Information and HIV/AIDS Prevention Behavior in Adolescents in Indonesia. *Preventif : Jurnal Kesehatan Masyarakat*, *13*(2). https://doi.org/10.22487/preventif.v13i2.319