



Scoping Review: Enhancing Self-Efficacy and Mitigating Stigma with HIV/AIDS Health Education for Adolescents

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Abstract

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Health education plays a critical role in enhancing individuals' knowledge, attitudes, and skills to address health issues such as HIV/AIDS. Given the rising prevalence of HIV/AIDS among adolescents, effective health education is essential for mitigating social stigma and boosting self-efficacy in this group. This study aims to evaluate the effectiveness of HIV/AIDS health education in improving self-efficacy and reducing stigma among adolescents. A scoping review methodology was employed, following the PRISMA-ScR guidelines, with literature searches conducted across academic databases such as PubMed, Google Scholar, and Scopus. The results indicate that while numerous educational interventions have been implemented, few directly address the psychological impacts of stigma and self-efficacy. This study concludes that well-designed educational programs can alter adolescents' perceptions of HIV/AIDS, enhance their self-confidence, and reduce societal stigma. These programs improve adolescents' understanding of HIV/AIDS prevention while alleviating the anxiety and fear often linked to social stigma. The findings are expected to provide valuable insights for developing more effective HIV/AIDS health education initiatives, focusing on stigma reduction and the enhancement of self-efficacy among adolescents.

Keywords:

Adolescents, Health Education, HIV/AIDS, Self-Efficacy, Stigma

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INTRODUCTION

Health education is an essential process for improving individuals' knowledge, attitudes, and competencies in managing health concerns. Diverse pedagogical approaches, including lectures, seminars, and interactive media, are utilized to convey health messages to the public. The principal aims of health education are to enhance knowledge, modify attitudes, and refine practices pertaining to public health (Kemenkes, 2023). Under Law No. 17 of 2023, the government is tasked with executing health education via promotive and



preventative techniques, which encompass the utilization of interactive educational media to engage schools in its distribution (UU RI, 2023).

Health education regarding HIV/AIDS is essential for teenagers, given the annual increase in global HIV/AIDS incidence. HIV/AIDS is an infectious disease induced by the Human Immunodeficiency Virus (HIV), which assaults the immune system, particularly focusing on CD4+ T cells (UNAIDS, 2023).

HIV is spread via sexual intercourse, sharing of needles, and vertical transmission from mother to offspring (Kemenkes, 2023). The global demographic of individuals aged 15-24 demonstrates a significant prevalence of HIV transmission, rendering them especially susceptible to HIV infection (WHO, 2023). In 2022, it was estimated that 1,929 adolescents aged 15–24 in Indonesia contracted HIV, reflecting a 3.8% increase from the previous year. This rise is primarily attributed to a lack of comprehensive knowledge about HIV/AIDS and the prevalence of high-risk sexual behaviors (Farhan et al., 2024).

Adolescents, as a susceptible demographic, frequently encounter social stigma associated with HIV/AIDS, hindering their access to sufficient information and healthcare treatments (Feyissa et al., 2019). Stigma is linked not only to a deficiency in knowing HIV/AIDS but also to social and cultural beliefs that may obstruct teenagers from candidly addressing the topic (Bergam et al., 2022). Consequently, a robust health education strategy is essential for mitigating stigma and empowering adolescents to enhance their self-efficacy in confronting these issues (Ferris France et al., 2023).

Health education regarding HIV/AIDS might alter adolescents' perspectives of the illness, encompassing both medical understanding and societal attitudes towards individuals living with HIV (Kose et al., 2021). Studies demonstrate that effectively structured education can bolster adolescents' self-esteem by improving their comprehension of HIV/AIDS prevention, thereby alleviating the fear or anxiety frequently linked to social stigma (Boyes et al., 2018).

Despite the implementation of numerous HIV/AIDS education interventions, few clearly examine the influence of education on psychosocial changes in adolescents, notably regarding stigma reduction and the enhancement of self-efficacy (Feyissa et al., 2019). Most current studies mostly concentrate on enhancing knowledge or behaviors associated with HIV/AIDS prevention, with scant research examining how education can directly affect psychosocial factors such as stigma or self-efficacy (Bhana et al., 2014).

This scoping review aims to evaluate of HIV/AIDS health education in enhancing self-efficacy and diminishing stigma among adolescents. This study's findings aim to offer profound insights into successful health education initiatives that might bolster the self-confidence of teenagers living with HIV/AIDS and mitigate the social stigma they encounter.

METHODS

This study utilizes the scoping review method, comprising a sequence of defined processes aimed at carefully collecting, screening, and synthesizing literature pertinent to the research issue (Pool et al., 2024). The preliminary stage

entails crafting a precise research topic and delineating explicit inclusion and exclusion criteria to direct the literature search procedure.

A thorough literature study is performed throughout academic databases, peer-reviewed publications, and pertinent sources. Upon collection, the literature is subjected to a stringent selection procedure according to established inclusion and exclusion criteria. The chosen studies undergo qualitative data extraction and interpretative analysis to discern major themes, patterns, and relationships among emerging concepts. This analytical method allows for a detailed integration of current research results, thereby providing a complete answer to the particular study issue. The research inquiry is structured using the Population, Exposure, and Outcome (PEO) mnemonic, as detailed in Table 1 (Alan Davies, 2024). How effective is HIV/AIDS health education in enhancing self-efficacy and reducing stigma among adolescents?

Table 1. Selection of the PEO Mnemonic

<i>Population</i>	<i>Exposure</i>	<i>Outcome</i>
Adolescents	HIV/AIDS health education	Improvement in self-efficacy and reduction of stigma.

Source: Author's Discussion, 2025

The author defines the study's parameters by specifying inclusion and exclusion criteria for the literature review (Table 2). The objective of establishing these criteria is to guarantee that the study review remains concentrated and pertinent to the research subject. The keywords used in the literature search include: *Adolescents, Health Education, HIV/AIDS, Self-Efficacy, Stigma*

Table 2. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Research articles published between 2020-2024	Books, blogs
Articles written in Indonesian and English	Full-text access requiring payment
Articles available in full text	

Source: Author's Discussion, 2025

The author performed a literature review utilizing multiple academic search engines according to specified keywords. A total of 1,581 items were successfully gathered, with the subsequent distribution: 562 articles sourced from PubMed, 245 from ScienceDirect, and 89 from Scopus. The author structured this scoping review in accordance with PRISMA guidelines and included a PRISMA diagram to depict the number of identified articles, the screening process, the studies that fulfilled the inclusion criteria, and the final selection of literature for the comprehensive review (Figure 1).

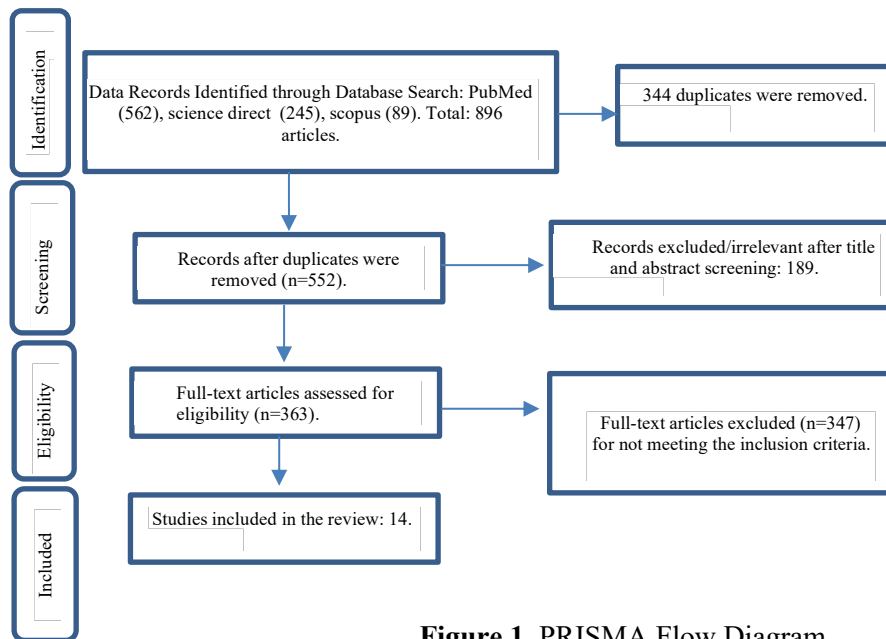


Figure 1. PRISMA Flow Diagram

RESULTS

This study's data synthesis technique include gathering and summarizing publications that fulfil the inclusion criteria into an organized table. This table presents data on the authors, title, findings, Research Design, objective, sample size and outcomes of the 14 examined articles.

Table 1. Data Extraction

No	Author(s)/ Year	Title	Research Design	Objective	Sample Size	Conclusion
1	(Tao et al., 2022)	<i>The relationship between HIV-related stigma and HIV self-management among men who have sex with men: The chain mediating role of social support and self-efficacy</i>	cross-sectional	Investigating the Correlation Between HIV Stigma and Self-Management in Men Who Have Sex with Men, Mediated by Social Support and Self-Efficacy	459	The results suggest that strategies to enhance HIV self-management in men who have sex with men (MSM) living with HIV should include a comprehensive approach. Interventions should not only aim to diminish stigma but also emphasize the enhancement of social support and self-efficacy.
2	(Yasmin et al., 2023)	<i>Flashcard-Based Online Educational Game for Improving HIV-AIDS Knowledge and Stigma</i>	Quasi-Experiment with a Pretest-Posttest Approach Involving Interventi	This study sought to evaluate the effect of an online educational flashcard game on enhancing knowledge and diminishing	112 students	The findings demonstrate that the flashcard-based educational game effectively improved knowledge of HIV/AIDS and diminished stigma

			on and Control Groups	HIV/AIDS stigma		towards individuals affected by HIV/AIDS. This method can serve as an effective health promotion instrument for educating pupils about HIV/AIDS prevention and stigma alleviation.
3	(Wilandika et al., 2022)	<i>The Kasaba Quartet: The Impact of Card Games on Knowledge and Self-Efficacy HIV/AIDS Prevention</i>	<i>Quasi-experiment with design equivalent time-series</i>	Assessing the Influence of the Kasaba Quartet Game on Adolescents' Knowledge and Self-Efficacy in HIV/AIDS Prevention	30 adolescents	The Kasaba Quartet card game proved successful in improving teenagers' knowledge and self-efficacy for the avoidance of HIV/AIDS risk behaviors. This teaching approach can function as an alternative option to enhance adolescents' comprehension and self-assurance in preventing the transmission of HIV/AIDS.
4	(Lestari Mukti Palupi, 2024).	Impact of HIV/AIDS Health Education on Preventive Behavior Against Premarital Sex Among Adolescents	Pre-experimental with a one-group pretest-posttest design	To assess the impact of HIV/AIDS education on the preventive behavior regarding premarital sex among 10th-grade students at SMAN 1 Polanharjo.	72 respondents	The implementation of HIV/AIDS health education significantly influenced the improvement of preventive behavior against premarital sex among 10th-grade students at SMAN 1 Polanharjo.
5	(Arisudhana et al., 2023)	Health Education for People Living with HIV/AIDS to Enhance Self-Esteem in Coping with Stigma and Discrimination	<i>Direct Service Learning with a Lecture Approach</i>	This intervention aimed to enhance knowledge and self-esteem behaviours in individuals living with HIV/AIDS (PLWHA) as they confront stigma and discrimination.	18 Participants	The health education program played a pivotal role in improving the self-esteem of PLWHA, with the majority of participants achieving a moderate level of self-esteem. This enhancement in self-esteem contributed significantly to their ability to cope with stigma and discrimination.
6	(Wilandika, 2020)	Health Mentorship Using Case-Based Learning (CBL) in Enhancing Self-Efficacy for HIV Risk Behavior Prevention Among University Students	Health mentorship using the case-based learning (CBL) method	Improvement in HIV/AIDS knowledge and self-efficacy in preventing HIV-related risk behaviors among university	21 students	The case-based learning method effectively enhanced students' knowledge of HIV/AIDS and self-efficacy in preventing HIV-related risk behaviors,

		in Bandung City		students		with the majority of students showing significant improvement in both aspects.
7.	(Yunicha Viridula et al., 2022)	Effectiveness of Health Promotion in Enhancing Self-Efficacy and Knowledge about STIs, HIV, and AIDS among High School Students	<i>Quasi-experimental with two interventions (video method and leaflet method)</i>	To assess the effectiveness of health promotion in improving self-efficacy and knowledge about sexually transmitted infections (STIs), HIV, and AIDS among high school students.	74 students	The video-based health promotion strategy proved more efficient than the leaflet method in improving students' self-efficacy and understanding of STIs, HIV, and AIDS.
8	(Gufron Wahyudi, 2024).	HIV/AIDS Education for Adolescents: Reducing Stigma and Enhancing Knowledge	Community service program using lectures with pre-test and post-test evaluations.	To enhance adolescents' knowledge about HIV/AIDS and reduce negative stigma toward People Living with HIV/AIDS (PLWHA).	16 adolescents	Health education programs on HIV/AIDS effectively enhance teenagers' awareness and shift the negative stigma against people living with HIV/AIDS to a more positive perspective
9	(Ahmad et al., 2024)	Enhancing Community Awareness on HIV/AIDS Transmission and Prevention through the "Stop Stigma and Discrimination Against People Living with HIV/AIDS (PLWHA)" Educational Campaign	Community Outreach Program through Education and Pre-Test Post Test Evaluation	Enhancing Community Knowledge on HIV/AIDS Transmission and Prevention, and Reducing Stigma Against People Living with HIV/AIDS (PLWHA)	62 participants	The educational intervention successfully improved community comprehension and awareness of HIV/AIDS transmission and preventive strategies, while also diminishing stigma towards individuals living with HIV/AIDS (PLWHA).
10	(Jacobi et al., 2020)	My Friend with HIV Remains a Friend": HIV/AIDS Stigma Reduction through Education in Secondary Schools—A Pilot Project in Buea, Cameroon	Pilot Educational Intervention with Pre-Test and Post-Test Involving Secondary School Students	Reducing HIV/AIDS Stigma Among Secondary School Students in Buea, Cameroon, through Education Delivered by HIV-Positive Teachers	200 students	Education about HIV/AIDS provided by educators who are openly HIV-positive has demonstrated efficacy in diminishing stigma among students. This method has demonstrated potential for wider application in reducing HIV/AIDS-related stigma, underscoring its significance as a transformative strategy in educational environments.

11	(Ismail & Yona, 2023)	The Impact of HIV Education in Schools on Eliminating Stigma towards People Living with HIV/AIDS (PLWHA)	Quasi-Experimental Study	This study aimed to assess the impact of HIV education on eliminating stigma towards People Living with HIV/AIDS (PLWHA) among junior high school students in East Jakarta.	71 respondents	The HIV education provided via videos and leaflets proved helpful in increasing knowledge and diminishing stigma towards PLWHA among pupils.
12	(Retnowati et al., n.d.) 2023	The Relationship Between Education and Beliefs with Religious Leaders' Stigma Towards People Living with HIV/AIDS (PLWHA)	Correlational Analytic Study with a Cross-Sectional Approach	This study aimed to examine the relationship between education and beliefs with the stigma held by religious leaders towards People Living with HIV/AIDS (PLWHA) in Banyumas Regency	164 participants	The results indicated a substantial correlation between the beliefs of religious leaders and the stigma associated with PLWHA; however, education did not demonstrate a meaningful association with this stigma.
13	(Picauly et al., 2020)	Effectiveness of Health Promotion in Enhancing Self-Efficacy of SMAN 2 Students Regarding Sexually Transmitted Infections (STIs), HIV, and AIDS in Kupang City	Quasi-Experimental Design with One-Group Pretest-Posttest	This study evaluates the effectiveness of health promotion in improving students' knowledge and self-efficacy regarding STIs, HIV, and AIDS	146 students	The results demonstrate that health promotion markedly improved students' knowledge on HIV/AIDS; however, no significant difference was noted in self-efficacy levels between the small and large group interventions.
14	(Hidayati et al., 2022)	Adolescents' Knowledge of HIV/AIDS and Stigma Towards People Living with HIV/AIDS (PLWHA) in Indonesia	Quantitative Study with a Cross-Sectional Approach	The study aimed to examine the relationship between adolescents' knowledge of HIV/AIDS and stigma towards People Living with HIV/AIDS (PLWHA) in Indonesia	437 adolescents and young adults.	A thorough comprehension of HIV/AIDS among adolescents correlates with a decrease in stigma towards individuals living with HIV/AIDS (PLWHA), underscoring the significance of education in alleviating prejudice.

Indonesia region is the source of the majority of articles related to health education on HIV/AIDS, as indicated by the selected research. Twelve studies were conducted in Indonesia, one in China, and one in Cameroon. This phenomenon implies that, despite the fact that HIV/AIDS is a global concern, the regional focus for research on the effectiveness of health education and stigma is Indonesia and several other Asian countries, due to the increased prevalence of the disease. The

studies underscore the importance of utilizing health education methods to reduce stigma and increase self-efficacy. Indonesia, a nation with a notably high HIV prevalence, encounters substantial obstacles in its efforts to combat stigma against individuals living with HIV/AIDS (PLWHA). This study examines the potential of health education to improve the self-efficacy of participants by reducing negative attitudes toward PLWHA and enhancing adolescents' comprehension of HIV/AIDS. In addition, demographic variables, including age, gender, and educational attainment, are essential in identifying groups that are more susceptible to stigma. The anticipated outcome of these interventions is the cultivation of a more comprehensive comprehension of HIV/AIDS, which will subsequently diminish stigmatizing and discriminatory attitudes toward PLWHA. This is a crucial step in the endeavor to manage the HIV/AIDS epidemic in Indonesia and other Asian countries.

Based on these results, the most frequently employed quasi-experimental designs, particularly pretest-posttest methods, are indicative of the emphasis on assessing the efficacy of HIV/AIDS health education interventions. Studies that employed cross-sectional analyses investigated the relationships between self-efficacy, stigma, and knowledge at a singular point in time. Pre-experimental designs, direct service learning approaches, and case-based learning offered valuable insights into the efficacy of a variety of educational strategies. This wide variety of analytical methods underscores the comprehensive and diverse methodologies employed to evaluate interventions that are designed to improve self-efficacy and reduce stigma among adolescents in the context of HIV/AIDS."

Table 3. Overview of the Research Outcomes (n = 14)

Indicator	Significance	
	n	References
Knowledge of HIV/AIDS	5	(Yasmin et al., 2023), (Ahmad et al., 2024), (Ismail & Yona, 2023), (Picauly et al., 2020), (Hidayati et al., 2022)
Stigma HIV/AIDS	5	(Yasmin et al., 2023), (Jacobi et al., 2020), (Ismail & Yona, 2023), (Gufron Wahyudi, 2024), (Ahmad et al., 2024);39
Self-efficacy	4	(Wilandika et al., 2022), (Wilandika et al., 2021), (Yunicha Viridula et al., 2022), (Gufron Wahyudi, 2024)
HIV/AIDS Prevention Behavior	2	(Lestari Mukti Palupi, 2024), (Arisudhana et al., 2023)

Discussion

Knowledge of HIV/AIDS

Understanding HIV/AIDS is crucial for the prevention and management of the disease, especially among high-risk groups. A thorough comprehension of HIV/AIDS

allows individuals to more effectively understand transmission methods, preventative tactics, and the consequences of the virus (Pachua et al., 2022). Studies demonstrate that understanding of HIV/AIDS greatly differs based on demographic parameters including age, educational attainment, and media exposure (Nasir et al., 2023). Research in Ethiopia indicated that, despite advancements in education, employment, and media accessibility, the general population's understanding of HIV/AIDS remains inadequate (Terefe et al., 2023).

Additionally, survey data from Nigeria reveals that sufficient awareness of HIV/AIDS is pivotal in decreasing its incidence, with women of greater educational attainment exhibiting a more thorough comprehension than their less educated counterparts (Yaya et al., 2019). Thus, augmenting HIV/AIDS knowledge via education and media exposure is essential, since heightened awareness diminishes stigma and promotes more engagement in treatment and prevention initiatives, ultimately leading to more successful disease management.

Stigma HIV/AIDS

The stigma surrounding HIV/AIDS significantly affects mental health and patients' ability to manage the condition effectively (Chan et al., 2021). The internalization of this stigma frequently results in a reduced feeling of self-efficacy, eroding confidence in treatment adherence and HIV management (Yigit et al., 2020). Studies demonstrate that a decrease in HIV-related stigma is positively associated with increased self-efficacy in treatment adherence and prevention, ultimately improving health outcomes (Yigit et al., 2020). A study in the United States revealed that a reduction in internalized stigma correlated with enhanced medication adherence and disease management, with self-efficacy in adherence acting as a pivotal mediator in this association (Yigit et al., 2020). Research from Canada indicates that the decrease in HIV stigma improves medication adherence by increasing patients' confidence in their capacity to adhere to antiretroviral therapy (ART) (Lam et al., 2018). In Zambia, less stigma internalization correlated with greater quality of life and increased medicine adherence (Masa et al., 2022).

Self-efficacy

Self-efficacy in managing HIV symptoms has demonstrated the ability to alleviate the adverse effects of stigma on the quality of life of individuals living with HIV/AIDS (PLWHA) (Zhou et al., 2020). A study in China revealed that self-efficacy in HIV treatment considerably mitigates the adverse impacts of HIV-related stigma on mental health and quality of life, while also alleviating the anxiety commonly experienced by people living with HIV/AIDS (PLWHA). Elevated self-efficacy empowers individuals to navigate social stigma with greater confidence, so improving their capacity to preserve both physical and emotional well-being (Zhou et al., 2020). A study in Thailand indicated that self-efficacy in managing HIV symptoms correlated with a decrease in internalized stigma, subsequently enhancing the quality of life for those living with HIV (Aurpibul et al., 2020). Subsequent research in Kenya revealed that enhanced self-efficacy in HIV care favourably affected patients' attitudes towards treatment and diminished the shame and anxiety linked to HIV stigma (Gitahi et al., 2022).

HIV/AIDS Prevention Behavior

The preventative behaviours for HIV/AIDS are greatly affected by an individual's understanding of HIV, self-efficacy, and societal stigma (Kadengye & Dalal, 2019). An augmented understanding of HIV and associated prevention strategies can enhance an individual's ability to engage in effective preventive practices, including condom utilization and the avoidance of high-risk behaviours (Faust & Yaya, 2018). A study in Uganda

indicated that adolescents possessing a deeper comprehension of HIV were less prone to partake in risky sexual behaviours, including unprotected intercourse, and demonstrated a higher propensity for frequent HIV testing (Izudi & Kadengye, 2022). Moreover, self-efficacy, defined as the conviction in one's capacity to avert HIV, is of paramount importance. Research in Ethiopia demonstrated that self-efficacy in HIV prevention correlates positively with an enhancement in preventive actions; individuals who perceive themselves as more competent in safeguarding against HIV are more proactive in mitigating related risks (Kene et al., 2020).

Nonetheless, HIV-related stigma can act as a considerable impediment to the implementation of preventive measures (Babel et al., 2021). Studies indicate that HIV stigma inhibits individuals from pursuing knowledge, engaging in preventive measures, and obtaining HIV testing (Krueger et al., 2020). For example, significant stigma around HIV among healthcare professionals can diminish the efficacy of HIV preventive strategies, notwithstanding their comprehensive understanding of HIV prevention (Okpua & Godwin C., 2023). Consequently, mitigating stigma through education and interventions designed to augment HIV knowledge and self-efficacy is essential for promoting HIV preventive behaviors within the community, particularly among teenagers (Dunbar et al., 2020).

LIMITATIONS

This study has several limitations, including the selection of studies limited to articles published in Indonesian and English between 2020 and 2024, which may overlook valuable contributions from research in other languages or from earlier years. Additionally, the focus on self-efficacy and stigma does not account for other social, cultural, and economic factors that also influence adolescents' understanding of HIV/AIDS. The scoping review methodology employed has limitations in providing in-depth analysis of the quality of individual studies, and the reliance on literature available in limited databases further restricts the scope. The variability in the research designs employed across studies may also affect the consistency of the findings, while many of the studies reviewed did not assess the long-term effectiveness of the educational interventions implemented.

POLICY IMPLICATIONS

The findings of this study highlight the need for comprehensive HIV/AIDS education programs for adolescents. Policymakers should prioritize integrating HIV/AIDS education into national curricula, covering not only prevention knowledge but also addressing stigma reduction and enhancing self-efficacy. The adoption of interactive teaching methods such as digital tools or game cards, can significantly increase adolescent engagement. Regular evaluations are essential to assess program effectiveness, particularly focusing on long-term impacts. Furthermore, training educators and health professionals to deliver content sensitively to cultural and social factors is crucial. Strengthening collaboration between educational institutions, healthcare providers, and community organizations will also enhance efforts to reduce stigma and empower adolescents in making informed health decisions.

CONCLUSION

HIV/AIDS health education is essential for the development of self-efficacy and the reduction of stigma among adolescents. Health education provides adolescents with a more profound understanding of HIV/AIDS through a variety of effective intervention methods, thereby bolstering their self-assurance in the face of the enduring social stigma. Despite the extensive investigation of this subject by existing research, there is still a dearth of research on the influence of education on psychosocial factors, including self-efficacy and stigma. Consequently, additional research is necessary to create educational strategies that are more comprehensive and focused on enhancing the well-being of adolescents affected by HIV/AIDS and public health.

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REFERENCES

- Ahmad, M., Fernandez, G. V., & Kundre, R. M. (2024). Peningkatan Kesadaran Masyarakat tentang Cara Penularan dan Pencegahan HIV/AIDS Melalui Penyuluhan Stop Stigma dan Diskriminasi terhadap ODHA. *Jurnal Abmas Negeri (JAGRI)*, 5(1), 125–132. <https://doi.org/10.36590/jagri.v5i1.770>
- Alan Davies. (2024). An introduction to carrying out and appraising systematic reviews in healthcare. *Journal of Paramedic Practice*, Vol. 15, No. 11.
- Arisudhana, G. A. B., Dewi, D. P. R., & Antarika, G. Y. (2023). Pendidikan Kesehatan Pada Orang Dengan HIV AIDS Untuk Meningkatkan Self-Esteem Dalam Upaya Menghadapi Stigma dan Diskriminasi. *Jurnal Sinergi Kesehatan Indonesia*, 1(2), 72–75. <https://doi.org/10.55887/jski.v1i2.16>
- Aurpibul, L., Pradsarakee, C., Sintupat, K., Wongnum, N., Chotecharoentanan, T., & Sudjaritruk, T. (2020). *Quality of Life and HIV Adherence Self-efficacy of Adolescents and Young Adults Living With Perinatal HIV in Chiang Mai, Thailand: A Cross-sectional Study*. <https://doi.org/10.21203/rs.3.rs-40624/v1>
- Babel, R. A., Wang, P., Alessi, E. J., Raymond, H. F., & Wei, C. (2021). Stigma, HIV Risk, and Access to HIV Prevention and Treatment Services Among Men Who have Sex with Men (MSM) in the United States: A Scoping Review. *AIDS and Behavior*, 25(11), 3574–3604. <https://doi.org/10.1007/s10461-021-03262-4>
- Bergam, S., Kuo, C., Atujuna, M., Pellowski, J. A., Mtukushe, B., Ndevu-Qwabe, N., Matiwane, M., Rencken, C. A., Belsky, M., Hoare, J., Bekker, L. G., & Harrison, A. D. (2022). “We Should Be Taught Self-Respect, Self-Confidence and Self-Love”: Youth Perspectives of Adult Influences on Their Sexuality and Relationships Among South African Adolescents Living With HIV. *Frontiers in Reproductive Health*, 4. <https://doi.org/10.3389/frph.2022.913170>
- Bhana, A., Mellins, C. A., Petersen, I., Alicea, S., Myeza, N., Holst, H., Abrams, E., John, S., Chhagan, M., Nestadt, D. F., Leu, C. S., & McKay, M. (2014). The VUKA family program: Piloting a family-based psychosocial intervention to promote health and mental health among HIV infected early adolescents in South Africa. *AIDS Care* -

- Psychological and Socio-Medical Aspects of AIDS/HIV*, 26(1), 1–11. <https://doi.org/10.1080/09540121.2013.806770>
- Boyes, M. E., Cluver, L. D., Meinck, F., Casale, M., Newnham, E., Boyes, M., & Fellow, S. R. (2018). *Mental health in South African adolescents living with HIV: Correlates of internalising and externalising symptoms*.
- Chan, R. C. H., Mak, W. W. S., Ma, G. Y. K., & Cheung, M. (2021). Interpersonal and intrapersonal manifestations of HIV stigma and their impacts on psychological distress and life satisfaction among people living with HIV: Toward a dual-process model. *Quality of Life Research*, 30(1), 145–156. <https://doi.org/10.1007/s11136-020-02618-y>
- Dunbar, W., Labat, A., Raccurt, C., Sohler, N., Pape, J. W., Maulet, N., & Coppieters, Y. (2020). A realist systematic review of stigma reduction interventions for HIV prevention and care continuum outcomes among men who have sex with men. In *International Journal of STD and AIDS* (Vol. 31, Issue 8, pp. 712–723). SAGE Publications Ltd. <https://doi.org/10.1177/0956462420924984>
- Farhan, M., Maulana, Z., Hasibuan, A., & Mauliah, S. (2024). Melonjaknya Kasus HIV Dikalangan Remaja Indonesia. *AMSIR COMMUNITY SERVICE JOURNAL, VOL 2, Nomor 1*.
- Faust, L., & Yaya, S. (2018). The effect of HIV educational interventions on HIV-related knowledge, condom use, and HIV incidence in sub-Saharan Africa: A systematic review and meta-analysis. In *BMC Public Health* (Vol. 18, Issue 1). BioMed Central Ltd. <https://doi.org/10.1186/s12889-018-6178-y>
- Ferris France, N., Byrne, E., Nyamwanza, O., Munatsi, V., Willis, N., Conroy, R., Vumbunu, S., Chinembiri, M., Maedziso, S., Katsande, M. A., Dongo, T. A., Crehan, E., & Mavhu, W. (2023). Wakakosha “You are Worth it”: reported impact of a community-based, peer-led HIV self-stigma intervention to improve self-worth and wellbeing among young people living with HIV in Zimbabwe. *Frontiers in Public Health*, 11. <https://doi.org/10.3389/fpubh.2023.1235150>
- Feyissa, G. T., Lockwood, C., Woldie, M., & Munn, Z. (2019). Reducing HIV-related stigma and discrimination in healthcare settings: A systematic review of quantitative evidence. *PLoS ONE*, 14(1). <https://doi.org/10.1371/journal.pone.0211298>
- Gitahi, N., Wahome, S., Bukusi, E. A., & Memiah, P. (2022). The role of self-efficacy in HIV treatment adherence and its interaction with psychosocial factors among HIV positive adolescents in transition to adult care in Kenya. *Vulnerable Children and Youth Studies*, 17(4), 308–319. <https://doi.org/10.1080/17450128.2021.1954736>
- Gufron Wahyudi, R. R. (2024). PENDIDIKAN HIV/AIDS UNTUK REMAJA: MENGURANGI STIGMA DAN MENINGKATKAN PENGETAHUAN. *Jurnal JAMAS, Vol. 2 No. 2*, 489 – 494.
- Hidayati, R. D., Tinggi, S., Kesehatan, I., Bhakti, P., & Lampung, B. (2022). PENGETAHUAN REMAJA TENTANG HIV/ AIDS DENGAN STIGMA TERHADAP ODHA DI INDONESIA. In *Jurnal Medika Malahayati* (Vol. 6, Issue 4).
- Ismail, R., & Yona, S. (2023). Pengaruh Pendidikan Kesehatan Tentang HIV di Sekolah dalam Eliminasi Stigma Pada Orang Dengan HIV/AIDS The effects of health education on HIV in schools to eliminate stigma among people with HIV/AIDS. *The Indonesian Journal Of Infectious Disease*, 9(1), 2023.
- Izudi, J., & Kadengye, D. T. (2022). Effect of comprehensive knowledge of HIV on risky sexual behaviours associated with HIV transmission among adult Ugandans: a propensity score-matched analysis. *BMJ Open*, 12(12), e064011. <https://doi.org/10.1136/bmjopen-2022-064011>

- Jacobi, C. A., Atanga, P. N., Bin, L. K., Fru, A. J. C., Eppel, G., Mbome, V. N., Etonde, H. E. M., Bogner, J. R., & Malfertheiner, P. (2020). "My Friend with HIV Remains a Friend": HIV/AIDS Stigma Reduction through Education in Secondary Schools—A Pilot Project in Buea, Cameroon. *Journal of the International Association of Providers of AIDS Care*, 19. <https://doi.org/10.1177/2325958219900713>
- Kadengye, D. T., & Dalal, S. (2019). Social intolerance, risky sexual behaviors and their association with HIV knowledge among Ugandan adults: results from a national survey. *AIDS Care - Psychological and Socio-Medical Aspects of AIDS/HIV*, 31(2), 250–254. <https://doi.org/10.1080/09540121.2018.1488028>
- Kemenkes. (2023). *HIV/AIDS "Seorang Pendamping Sebaya di Surabaya sedang mengantarkan Obat ARV untuk ODHIV pada Masa Pandemi COVID-19."*
- Kemenkes. (2023). *Kasus HIV dan Sifilis Meningkat, Penularan Didominasi Ibu Rumah Tangga – Sehat Negeriku.* <https://sehatnegeriku.kemkes.go.id/baca/rilis-media/20230508/5742944/kasus-hiv-dan-sifilis-meningkat-penularan-didominasi-ibu-rumah-tangga/>
- Kene, C., Adugna, H., Lemessa, K., & Deribe, L. (2020). Assessment of Level of HIV/AIDS Preventive Self-Efficacy and Associated Factors Among Regular Undergraduate Students of Madda Walabu University, Southeast Ethiopia, 2020. A Cross-Sectional Study. *Research Square*. <https://doi.org/10.21203/rs.3.rs-99726/v1>
- Kose, J., Lenz, C., Akuno, J., Kiiru, F., Odionyi, J. J., Otieno-Masaba, R., Okoth, E. A., Woelk, G., Leselewa, S., Fraaij, P. L., & Rakhmanina, N. (2021). Supporting adolescents living with HIV within boarding schools in Kenya. *PLoS ONE*, 16(12 December). <https://doi.org/10.1371/journal.pone.0260278>
- Krueger, E. A., Holloway, I. W., Lightfoot, M., Lin, A., Hammack, P. L., & Meyer, I. H. (2020). Psychological Distress, Felt Stigma, and HIV Prevention in a National Probability Sample of Sexual Minority Men. *LGBT Health*, 7(4), 190–197. <https://doi.org/10.1089/lgbt.2019.0280>
- Lam, A., Mayo, N. E., Scott, S., Brouillette, M.-J., & Fellows, L. K. (2018). HIV-Related Stigma Affects Cognition in Older Men Living With HIV. *J Acquir Immune Defic Syndr*. <http://links.lww.com/QAI/B234>.
- Lestari Mukti Palupi, D. (2024). PENGARUH PENERAPAN EDUKASI KESEHATAN TENTANG HIV/AIDS TERHADAP PERILAKU PENCEGAHAN SEKS BEBAS PADA REMAJA. *Journal of Language and Health, Volume 5 No 1*. <http://jurnal.globalhealthsciencegroup.com/index.php/JLH>
- Masa, R., Zimba, M., Tamta, M., Zimba, G., & Zulu, G. (2022). The association of perceived, internalized, and enacted HIV stigma with medication adherence, barriers to adherence, and mental health among young people living with HIV in Zambia. *Stigma and Health*, 7(4), 443–453. <https://doi.org/10.1037/sah0000404>
- Nasir, J. A., Khan, M. D., & Ahmed Zaidi, S. A. (2023). Factor Associated with HIV/AIDS knowledge among males: Findings from 2017-18 Pakistan Demographic and Health Survey. *Journal of Biosocial Science*, 55(6), 1169–1177. <https://doi.org/10.1017/S0021932022000542>
- Okpua, N. C., & Godwin C., A. (2023). Healthcare providers in Nigerian hospitals and HIV-related stigma: a systematic review. *Journal of Communication in Healthcare*, 16(2), 170–179. <https://doi.org/10.1080/17538068.2022.2121596>
- Pachua, L. N., Tannous, C., & Agho, K. E. (2022). Factors associated with knowledge, attitudes, and prevention towards hiv/aids among adults 15–49 years in mizoram, north east india: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 19(1). <https://doi.org/10.3390/ijerph19010440>
- Picauly, I., Gero, S., Pellokila, M. R., Yakub, N. P., Studi Ilmu Kesehatan Masyarakat, P., Studi Keperawatan, P., Kemenkes-Kupang, P., Agribisnis, J., Pertanian, F.,

- Keperawatan, J., & Nusantara-Kupang, S. (2020). *EFEKTIVITAS PROMOSI KESEHATAN DALAM MENINGKATKAN SELF EFFICACY SISWA SMAN 2 TENTANG INFEKSI MENULAR SEKSUAL, HIV dan AIDS DI KOTA KUPANG*.
- Pool, J., Akhlaghpour, S., Fatehi, F., & Burton-Jones, A. (2024). A systematic analysis of failures in protecting personal health data: A scoping review. In *International Journal of Information Management* (Vol. 74). Elsevier Ltd. <https://doi.org/10.1016/j.ijinfomgt.2023.102719>
- Retnowati, M., Kebidanan, A., & Purwokerto, Y. (n.d.). *HUBUNGAN PENDIDIKAN DAN KEPERCAYAAN DENGAN STIGMA TOKOH AGAMA TERHADAP ORANG DENGAN HIV/AIDS (ODHA) DI KABUPATEN BANYUMAS*.
- Tao, Y., Xiao, X., Ma, J., & Wang, H. (2022). The relationship between HIV-related stigma and HIV self-management among men who have sex with men: The chain mediating role of social support and self-efficacy. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1094575>
- Terefe, B., Techane, M. A., & Assimamaw, N. T. (2023). Comprehensive Knowledge, Attitudes, Behaviors, and Associated Factors of HIV/AIDS in Gondar City Public Health Facilities Among HIV Testing and Counselling Service Users, Northwest Ethiopia, 2022; an Ordinal Logistic Regression Analysis. *HIV/AIDS - Research and Palliative Care*, 15, 713–726. <https://doi.org/10.2147/HIV.S441447>
- UNAIDS. (2023). *THE PATH THAT ENDS AIDS 2023 UNAIDS GLOBAL AIDS UPDATE*. <http://www.wipo.int/amc/en/mediation/rules>
- UU RI. (2023). *Undang-undang (UU) Nomor 17 Tahun 2023 tentang Kesehatan*.
- WHO. (2023). *WHO releases updated guidance on adolescent health and well-being*. <https://www.who.int/news/item/11-10-2023-who-releases-updated-guidance-on-adolescent-health-and-well-being>
- Wilandika, A. (2020). Pendampingan Kesehatan Aplikasi Case-Based Learning (CBL) dalam Peningkatan Efikasi Diri Pencegahan Perilaku Berisiko HIV Pada Mahasiswa Perguruan Tinggi Di Kota Bandung. *Jurnal ABDINUS: Jurnal Pengabdian Nusantara*, 3(2), 156–164. <https://doi.org/10.29407/ja.v3i2.13659>
- Wilandika, A., Fatmawati, A., Farida, G., & Yusof, S. (2022). The Kasaba Quartet: The Impact of Card Games on Knowledge and Self-Efficacy HIV/AIDS Prevention. *Open Access Macedonian Journal of Medical Sciences*, 10, 341–348. <https://doi.org/10.3889/oamjms.2022.8681>
- Wilandika, A., Kamila, A., & Sofiyah, Y. (2021). The Effect of E-Module TRIAD Kesehatan Reproduksi Remaja (KRR) on HIV Self-Efficacy in Preventing HIV Vulnerable Behaviour. *Agustus*, 2021(2), 146–152. <https://doi.org/10.21009/JTP2001.6>
- Yasmin, I. F., Djannatun, T., & Widiyanti, D. (2023). FLASHCARD-BASED ONLINE EDUCATIONAL GAME FOR IMPROVING HIV-AIDS KNOWLEDGE AND STIGMA. *Indonesian Journal of Public Health*, 18(3), 457–469. <https://doi.org/10.20473/Ijph.v18i3.2023.457-469>
- Yaya, S., Ghose, B., Udenigwe, O., Shah, V., Hudani, A., & Ekholuenetale, M. (2019). Knowledge and attitude of HIV/AIDS among women in Nigeria: A cross-sectional study. *European Journal of Public Health*, 29(1), 111–117. <https://doi.org/10.1093/eurpub/cky131>
- Yigit, I., Bayramoglu, Y., Weiser, S. D., Johnson, M. O., Mugavero, M. J., Turan, J. M., & Turan, B. (2020). Changes in Internalized Stigma and HIV Health Outcomes in Individuals New to HIV Care: The Mediating Roles of Depression and Treatment Self-Efficacy. *AIDS Patient Care and STDs*, 34(11), 491–497. <https://doi.org/10.1089/apc.2020.0114>

- Yunicha Viridula, E., Wulandari, S., Fakultas, P. K., Kesehatan, I., & Kadiri, U. (2022). EFEKTIVITAS PROMOSI KESEHATAN DALAM MENINGKATKAN SELF EFFICACY DAN PENGETAHUAN TENTANG IMS, HIV DAN AIDS PADA SISWA SMA. In *Jurnal Ilmu Keperawatan dan Kebidanan* (Vol. 13, Issue 2).
- Zhou, G., Li, X., Qiao, S., Shen, Z., & Zhou, Y. (2020). HIV symptom management self-efficacy mediates the relationship of internalized stigma and quality of life among people living with HIV in China. *Journal of Health Psychology*, 25(3), 311–321. <https://doi.org/10.1177/1359105317715077>