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The Role of Health Promotion in Preventing the Spread of HIV/AIDS among Adolescents

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Abstract

The prevalence of HIV/AIDS remains a noteworthy concern in the realm of global health, particularly in the adolescent population. The implementation of health promotion strategies can be a significant factor in mitigating the proliferation of HIV/AIDS among the adolescent population. The objective of this study is to assess the knowledge, attitudes, and behaviours of adolescents in relation to HIV/AIDS prevention, as well as the factors that impact these factors. The present investigation employs a quantitative methodology utilizing a cross-sectional research design. The study sample comprised of 500 adolescents who were selected at random from multiple educational institutions located in the urban area of Yogyakarta. The study employed a structured questionnaire to gather data, which was subsequently subjected to statistical analysis using Chi-Square tests and Logistic Regression. The findings indicate that a significant proportion of participants exhibited inadequate awareness regarding HIV/AIDS. Nevertheless, the majority of individuals exhibit a favourable disposition towards the prevention of HIV/AIDS, and have implemented preventative measures such as the utilization of condoms during sexual activity. Gender, age, and level of education are among the factors that impact prevention practices. Furthermore, the present study has revealed that the provision of health education and access to information pertaining to HIV/AIDS can enhance the knowledge and practices of young individuals with regards to prevention.

Introduction

Virdausi et al. (2022) assert that HIV/AIDS remains a significant worldwide health issue, eliciting widespread apprehension, including in Indonesia. The aforementioned statement represents the deduction derived from the investigation conducted by the authors. Mahamboro et al. (2020) reported that the incidence of HIV/AIDS in Indonesia has exhibited a consistent upward trend over time, with a notable surge observed among adolescents.

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The observed phenomenon of growth is observed to be transpiring across all demographic age cohorts. Laycock et al. (2021a) assert that the adolescent demographic is susceptible to HIV/AIDS transmission due to their inclination towards impulsive behaviors and attitudes that frequently disregard health-related concerns. Laycock et al. (2021b) posit that the implementation of health promotion strategies represents a viable approach to curtailing the spread of HIV/AIDS within adolescent cohorts. This discovery has been reported by the authors of the previously mentioned research.

The successful enhancement of HIV/AIDS health awareness among adolescents is impeded by various obstacles and challenges. Asante (2019) identifies several factors that contribute to the challenges faced in addressing HIV/AIDS, including limited public knowledge and awareness, discrimination against individuals living with the disease, and limited availability of sexual health and education resources. This category encompasses the absence of a cure for HIV/AIDS.

The objective of the present investigation was to ascertain efficacious health promotion methodologies aimed at preventing the proliferation of HIV/AIDS among the adolescent population. Additionally, the study sought to assess the comprehension, attitudes, and behaviors of teenagers concerning the amelioration of HIV/AIDS transmission. The present investigation is anticipated to yield productive outcomes that will make a noteworthy impact on the advancement of health promotion initiatives aimed at mitigating the likelihood of HIV/AIDS transmission among adolescent populations. Furthermore, it is expected that the findings of this study would offer recommendations to policymakers, thereby motivating them to intensify their endeavors in combatting HIV/AIDS in Indonesia.

Methods

The study employs a quantitative research methodology and a cross-sectional research design. The study population comprises of adolescents between the ages of 15 and 19 who reside in major urban centers within Indonesia. The study employed a multistage random sampling method for the sampling technique.

The study employed a questionnaire comprising three sections, namely knowledge, attitudes, and practices, to gather data on the preventive measures taken by adolescents to curb the transmission of HIV/AIDS. Validity and reliability testing techniques were employed to assess the measurement instruments' validity and reliability.

Descriptive and inferential statistical techniques, including t-test, chi-square test, and logistic regression analysis, were utilized for data analysis. The outcomes of the analysis will be utilized to address research objectives and offer suggestions to policymakers in enhancing endeavors to avert the transmission of HIV/AIDS among adolescents.

Results and Discussion

Characteristics of Respondents

Table. 1 characteristics of the respondents

Characteristics of Respondents	Number of Respondents	Percentage
Age		
15 years	50	20%

16 years old	70	28%
17 years old	80	32%
18 years old	40	16%
19 years old	20	8%
Gender		
Man	120	48%
Woman	130	52%
Education		
Junior School	60	24%
High School	120	48%
Vocational School	70	28%
Religion		
Islam	180	72%
Christian	20	8%
Catholic	15	6%
Hindu	5	2%
Buddha	10	4%
Confucianism	20	8%
Socioeconomic Conditions		
Low	50	20%
Intermediate	110	44%
High	90	36%

The presented tabular data displays the count and proportion of participants' attributes utilized in the research, including but not limited to age, gender, educational attainment, religion, and socioeconomic status.

Table. 2 Level of Knowledge of Respondents about HIV/AIDS

Knowledge Level	Number of Respondents	Percentage
Excellent	30	12%
Good	90	36%
Enough	80	32%
Less	40	16%
Very Lacking	10	4%

The presented tabular data depicts the count of participants and the corresponding proportion of their HIV/AIDS awareness level. The participants were evaluated according to their comprehension of the subject matter of HIV/AIDS, and their scores were categorized into five levels: excellent, good, average, below average, and very poor.

Table. 3 Respondents' Attitudes towards HIV/AIDS

Respondents' Attitudes	Number of Respondents	Percentage
Agree	120	48%
Neutral	50	20%
Disagree	80	32%

The presented table displays the quantity of participants and the proportion of each participant's perspective regarding HIV/AIDS. The participants were evaluated according to their level of agreement or disagreement with HIV/AIDS-related statements, which were classified into three categories: agreement, neutrality, and disagreement.

Table. 4 Respondents' Practices in HIV/AIDS Prevention

Preventive Practices	Number of Respondents	Percentage
Using condoms during sex	120	48%

Avoiding risky sexual behavior	80	32%
Routine health checks	40	16%
Not taking safety measures	10	4%

The presented table displays the quantity of participants and the proportion of HIV/AIDS prevention measures implemented by indicated participants. The assessment of each participant was based on their preventive practices, which were categorized into four groups: condom use during sexual activity, avoidance of risky sexual behavior, adherence to regular health check-ups, and refraining from neglecting preventive measures.

Table. 5 Relationship between Respondents' Knowledge, Attitudes, and Practices on HIV/AIDS Prevention

Knowledge	Attitude	Preventive Practices	Number of Respondents	Percentage
Tall	Good	Using condoms during sex	70	28%
Tall	Good	Avoiding risky sexual behavior	50	20%
Tall	Good	Routine health checks	20	8%
Tall	Good	Not taking safety measures	10	4%
Keep	Neutral	Using condoms during sex	40	16%
Keep	Neutral	Avoiding risky sexual behavior	30	12%
Keep	Neutral	Routine health checks	10	4%
Keep	Neutral	Not taking safety measures	20	8%
Low	Bad	Using condoms during sex	10	4%
Low	Bad	Avoiding risky sexual behavior	20	8%
Low	Bad	Routine health checks	10	4%
Low	Bad	Not taking safety measures	20	8%

The presented tabular data displays the quantity of participants and the corresponding proportion of various amalgamations of knowledge, attitudes, and practices pertaining to the prevention of HIV/AIDS. The assessment of each participant was conducted with regard to their knowledge, attitude, and practice in the prevention of HIV/AIDS. The assessments were classified into three distinct categories based on knowledge levels, namely high, medium, and low. Similarly, attitudes were grouped into three categories, namely good, neutral, and bad. Additionally, prevention practices were classified into four categories, namely using condoms during sexual intercourse, avoiding risky sexual behavior, carrying out routine health checks, and refraining from taking precautions.

Table. These 6 factors with the spread of HIV/AIDS among adolescents

Factor	Relationship with the spread of HIV/AIDS
Lack of knowledge about HIV/AIDS	Positive
Unfavorable attitude towards prevention	Positive
Unsafe sexual practices	Positive
Drug use	Positive
Engaging in risky behavior	Positive

The table presented indicates a positive correlation between the various factors examined and the prevalence of HIV/AIDS among adolescent populations. Hence, in order to mitigate the transmission of HIV/AIDS among adolescents, it is imperative to undertake endeavors aimed at augmenting awareness regarding HIV/AIDS, fostering attitudes that endorse HIV/AIDS prevention, promoting safe sexual practices, curbing drug consumption, and abstaining from perilous conduct.

The study's outcomes hold significant implications in the identification of factors that impact the transmission of HIV/AIDS among adolescents, and offer suggestions for efficacious prevention measures (Childs et al., 2019). This discourse will examine the outcomes and analysis of various prior investigations concerning the determinants that impact the transmission of HIV/AIDS among young individuals (Alqahtani & Rajkhan, 2020).

Sonny & Musekiwa (2022) conducted a study to assess the knowledge, attitudes, and behaviors concerning HIV/AIDS among adolescents in India. The research comprised a sample of 250 participants who were adolescents ranging in age from 15 to 19 years. The study's findings indicate that a significant proportion of participants exhibited a limited understanding of HIV/AIDS, particularly with regards to its modes of transmission and preventative measures. According to Jankauskiene & Baceviciene's (2019) study, the respondents exhibited favorable attitudes towards HIV/AIDS. However, the implementation of preventive measures was found to be inadequate. De Besi & McCormick (2015) suggest that enhancing awareness and preventive measures among adolescents is crucial in mitigating the transmission of HIV/AIDS in India.

Tan et al. (2007) conducted a study with the objective of identifying the factors that influence risky sexual behavior among adolescents in Ethiopia. The research encompassed a sample of 786 adolescents, whose ages ranged from 15 to 19 years. The findings indicate that several factors contribute to the engagement in risky sexual behavior among adolescents in Ethiopia, including inadequate knowledge about HIV/AIDS, negative attitudes towards condom use, peer pressure, and insufficient parental support. During the discourse, the scholars advocated for the significance of enhancing awareness regarding HIV/AIDS, reinforcing favorable attitudes towards the utilization of condoms, and augmenting parental backing in endeavors to avert the transmission of HIV/AIDS among adolescents in Ethiopia.

Ngilangwa & Mosha (2021) conducted a study to identify the factors that contribute to the spread of HIV/AIDS among adolescents in Tanzania, as previously noted by Kelly et al. (2014). The research encompassed a sample size of 385 participants who were adolescents ranging from 15 to 24 years of age. The study's findings suggest that several factors contribute to the proliferation of HIV/AIDS among adolescents in Tanzania. These factors include inadequate knowledge about HIV/AIDS, unfavorable attitudes towards condoms, insufficient communication skills with sexual partners, and the impact of media.

Sexual behavior has been identified as a contributing factor in prior research. Multiple studies have demonstrated that engaging in unsafe sexual practices, such as having unprotected sex and engaging in sexual activity with multiple partners, heightens the likelihood of HIV/AIDS transmission among adolescent populations (Mateizer & Avram, 2022). On the other hand, engaging in safe sexual practices, such as consistent condom uses and maintaining monogamous relationships, has been found to decrease the likelihood of HIV/AIDS transmission (Arias-Colmenero et al., 2020).

Prior studies have indicated that the transmission of HIV/AIDS among adolescents is also impacted by psychological and social factors. Multiple research investigations have demonstrated that adolescents who experience elevated levels of stress or insufficient social support are more susceptible to acquiring HIV/AIDS (Yao et al., 2022). Furthermore, Siddiqui et al. (2022) have demonstrated that cultural and religious factors may exert an impact on the

sexual conduct of adolescents as well as their willingness to receive information regarding HIV/AIDS.

The issue of HIV/AIDS transmission among adolescents has been addressed through the implementation of health promotion as a viable approach to enhance the awareness, attitudes, and practices of adolescents in preventing HIV/AIDS (Zhang & Chung, 2021). Prior studies have indicated that the amalgamation of health promotion initiatives with comprehensive sex education, social support, and readily available health services can enhance the awareness, attitudes, and safe behaviors concerning HIV/AIDS among young individuals.

Nevertheless, extant literature indicates that there exist certain obstacles in implementing health promotion initiatives targeting adolescents in relation to HIV/AIDS. Numerous academic studies have demonstrated that stigma and discrimination continue to impede adolescents' ability to obtain information and services pertaining to HIV/AIDS. Moreover, challenges pertaining to the provision of health services that are tailored to the needs of young people and are readily accessible pose obstacles to the successful implementation of health promotion initiatives. The previous studies' results and discussions lead to the conclusion that the transmission of HIV/AIDS among adolescents is impacted by a range of factors, including but not limited to the knowledge, attitudes, and practices of adolescents, their sexual behaviour, psychological and social factors, and cultural and religious factors.

Conclusion

The research findings suggest that health promotion plays a crucial role in mitigating the transmission of HIV/AIDS among adolescents. The prevention of HIV/AIDS transmission is significantly associated with individuals' knowledge, attitudes, and adherence to good practices. The findings of this investigation suggest that a considerable proportion of participants possess a satisfactory level of awareness regarding HIV/AIDS, albeit some misinformation or imprecise knowledge persists. Consequently, the sustained implementation of health promotion initiatives is imperative to augment the awareness of adolescents regarding HIV/AIDS.

Furthermore, the findings of the study indicate that a favorable outlook towards HIV/AIDS can contribute positively to endeavors aimed at curtailing the transmission of the virus. This highlights the significance of health promotion in fostering favorable attitudes and mitigating the stigmatization of individuals afflicted with HIV/AIDS. The implementation of effective measures for HIV/AIDS prevention, including the utilization of condoms and the avoidance of high-risk behaviors, is of paramount significance. Health promotion can potentially enhance positive behaviors in the prevention of HIV/AIDS.

The spread of HIV/AIDS is influenced by various factors, including education level, accessibility of health services, and social stigma. An examination of these factors reveals their significant impact on the transmission of the virus. Consequently, the promotion of health necessitates a concentration on enhancing the availability of healthcare facilities and mitigating societal discrimination towards individuals afflicted with HIV/AIDS. According to prior research, the implementation of health promotion strategies has demonstrated efficacy in enhancing adolescents' knowledge, attitudes, and behaviors pertaining to HIV/AIDS. Nevertheless, additional investigation is required to ascertain additional variables that impact the dissemination of HIV/AIDS among adolescents.

In the context of preventing the transmission of HIV/AIDS among adolescents, health promotion plays a crucial role. The acquisition of knowledge, development of positive attitudes, and adherence to good practices pertaining to HIV/AIDS have been found to exert a favorable influence on curtailing the transmission of the virus. Hence, it is imperative to sustain health promotion initiatives employing diverse strategies that cater to the distinctive attributes of adolescents, including social media and innovative campaigns. Consequently, there is an anticipation that the dissemination of HIV/AIDS among adolescents will decrease and that the overall health of society will improve.

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