

**SOCIAL FACTORS INFLUENCING THE SPREAD OF HIV/AIDS AMONG
YOUTH AND THE ROLE OF A HEALTHY LIFESTYLE IN ITS PREVENTION**

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ABSTRACT: HIV/AIDS remains a major global public health concern, particularly among young populations. This study aimed to analyze the social factors contributing to the spread of HIV among youth and to evaluate the role of a healthy lifestyle in its prevention. A cross-sectional study was conducted among 200 participants aged 16–24 years using a structured questionnaire to assess knowledge, attitudes, and behavioral patterns related to HIV. The results showed that only 38% of participants had a high level of knowledge about HIV, while risky behaviors such as unprotected sexual activity and substance use were reported in 34% of respondents. A significant association was found between low awareness and increased engagement in risky behaviors. In contrast, adherence to a healthy lifestyle was associated with a reduced likelihood of such behaviors. Social stigma and peer influence were identified as key factors affecting both prevention and testing practices. In conclusion, the study highlights the importance of comprehensive educational and behavioral interventions aimed at improving awareness, reducing stigma, and promoting healthy lifestyles among young people. These strategies are essential for effective HIV prevention and control.

KEYWORDS: HIV/AIDS; youth; social factors; healthy lifestyle; risk behavior; prevention; awareness; stigma; public health

INTRODUCTION

HIV/AIDS remains one of the most significant global public health challenges, particularly affecting young people in low- and middle-income countries. According to the World Health Organization, adolescents and young adults (aged 15–24 years) represent a substantial proportion of new HIV infections worldwide [1]. Despite advances in prevention, diagnosis, and treatment, the incidence of HIV among youth continues to be influenced by a complex interplay of social, behavioral, and economic factors. The spread of HIV among young populations is closely associated with various social determinants, including inadequate sexual education, low awareness of transmission routes, stigma, peer pressure, and limited access to healthcare services [2]. In many societies, cultural taboos surrounding sexual health discussions prevent young individuals from obtaining accurate information, thereby increasing their vulnerability to risky behaviors. Furthermore, socioeconomic instability and migration may also contribute to higher exposure to risk factors, such as unprotected sexual activity and substance abuse [3].

Another critical issue is the persistence of misconceptions about HIV transmission and prevention. Studies indicate that many young people lack comprehensive knowledge about safe sexual practices, including condom use and regular HIV testing [4]. This knowledge gap often leads to increased engagement in unsafe behaviors, thereby facilitating the spread of infection. Additionally, social stigma and discrimination against individuals living with HIV discourage testing and early diagnosis, which are essential for controlling the epidemic [5]. In this context, the promotion of a healthy lifestyle plays a crucial role in HIV prevention. A healthy lifestyle



encompasses not only physical well-being but also responsible behavior, informed decision-making, and risk avoidance. Preventive strategies such as sexual health education, promotion of safe behaviors, regular medical check-ups, and psychological support have been shown to significantly reduce the incidence of HIV among youth [6]. Moreover, community-based interventions and peer education programs are increasingly recognized as effective tools in influencing positive behavioral changes.

Recent approaches to HIV prevention emphasize a comprehensive and multidisciplinary strategy that integrates medical, educational, and social interventions. The use of modern technologies, including digital health platforms and social media, has further enhanced the dissemination of information and awareness among young people. These tools enable targeted communication and engagement, thereby improving the effectiveness of prevention programs [7]. Despite ongoing efforts, challenges remain in addressing the social factors that contribute to HIV transmission among youth. There is a need for more targeted interventions that consider cultural, social, and economic contexts. Strengthening health education systems and promoting healthy lifestyles are essential components of sustainable HIV prevention strategies.

METHODS

This study was designed as a cross-sectional analytical study aimed at investigating the social factors contributing to the spread of HIV/AIDS among young people and evaluating the role of a healthy lifestyle in its prevention. The research was conducted between January and October 2025 in selected urban and semi-urban educational institutions, including universities and vocational colleges. Ethical approval was obtained from the institutional review board, and all participants provided informed consent prior to data collection. A total of 200 participants aged between 16 and 24 years were recruited using a stratified random sampling method to ensure representation of different socioeconomic and educational backgrounds. Inclusion criteria consisted of young individuals within the specified age range who agreed to participate voluntarily, while exclusion criteria included individuals with incomplete responses or prior diagnosed severe mental or chronic health conditions that could affect survey reliability. The sample size was determined based on similar epidemiological studies focusing on youth behavior and HIV risk factors [1].

Data were collected using a structured and pre-validated questionnaire consisting of three main sections: demographic characteristics (age, gender, education level), knowledge and awareness about HIV transmission and prevention, and lifestyle-related behaviors, including sexual practices, substance use, physical activity, and health-seeking behavior. The questionnaire was adapted from internationally recognized survey tools used in HIV behavioral research and modified to suit the local context [2]. A pilot study involving 20 participants was conducted prior to the main data collection to assess clarity, reliability, and validity of the instrument. To assess knowledge levels, participants were asked a series of multiple-choice questions related to HIV transmission routes, preventive methods, and misconceptions. A scoring system was applied, where correct answers were assigned one point, and incorrect or “don’t know” responses were assigned zero points. Based on total scores, participants were categorized into low, moderate, and high knowledge groups [3]. Lifestyle factors were evaluated through self-reported behaviors, including frequency of physical activity, substance use (alcohol, tobacco), and engagement in risky sexual practices such as unprotected intercourse.



In addition, participants' attitudes toward individuals living with HIV and perceived stigma were assessed using a Likert scale ranging from strongly agree to strongly disagree. This allowed for the evaluation of social and psychological factors influencing HIV-related behaviors [4]. Data collection was conducted anonymously to ensure confidentiality and to minimize social desirability bias. Statistical analysis was performed using SPSS version 26.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the data. Inferential statistical methods such as the chi-square test were applied to assess associations between categorical variables, including knowledge levels and risk behaviors. Logistic regression analysis was used to identify significant predictors of risky behavior and low awareness levels among participants [5]. A p-value of less than 0.05 was considered statistically significant.

The study adhered to international ethical standards for human research, ensuring voluntary participation, confidentiality, and the right to withdraw at any stage without consequences. The methodology provided a comprehensive framework for analyzing both social determinants and lifestyle-related factors influencing HIV transmission among young people, thereby enabling a deeper understanding of preventive strategies [6].

RESULTS

A total of 200 participants aged 16–24 years were included in the study, with a mean age of 19.8 ± 2.3 years. Among them, 52% were female and 48% were male, indicating a relatively balanced gender distribution. The comprehensive analysis of the collected data revealed statistically significant associations between social determinants, levels of awareness, lifestyle behaviors, and the risk of HIV/AIDS transmission among young individuals. These findings underscore the multifactorial nature of HIV spread in youth populations and highlight the importance of both behavioral and social dimensions in prevention strategies. The evaluation of participants' knowledge regarding HIV transmission and prevention demonstrated that only 38% of respondents possessed a high level of knowledge, while 42% exhibited a moderate understanding, and 20% had low awareness. Despite ongoing public health campaigns, misconceptions about HIV transmission remained widespread. Notably, 27% of participants incorrectly believed that HIV could be transmitted through casual contact, such as sharing food, handshakes, or using public facilities. Additionally, 18% of respondents were uncertain about the effectiveness of preventive measures such as condom use and regular HIV testing. Statistical analysis revealed a strong and significant correlation between educational level and HIV-related knowledge ($p < 0.01$), indicating that individuals with higher education were more likely to demonstrate accurate understanding and awareness [1]. Furthermore, participants with higher knowledge scores were also more likely to report engagement in preventive behaviors, suggesting a direct link between education and risk reduction.

In terms of lifestyle and behavioral patterns, 34% of participants reported engaging in at least one high-risk behavior, including unprotected sexual activity, multiple sexual partners, or substance use. Among these individuals, 21% admitted to inconsistent condom use, while 13% reported that alcohol or substance use had influenced their decision-making during sexual encounters. A deeper analysis showed that participants with low levels of HIV-related knowledge were significantly more likely to engage in such risky behaviors compared to those with moderate or high awareness ($p < 0.05$) [2]. This finding highlights the critical role of education and awareness in shaping safe behavioral practices among youth. Moreover, the study



identified that adherence to a healthy lifestyle had a protective effect against risky behaviors. Participants who reported regular physical activity, balanced nutrition, and routine health check-ups were significantly less likely to engage in unsafe sexual practices. Statistical modeling demonstrated that individuals maintaining a healthy lifestyle had a lower probability of engaging in high-risk behaviors (OR = 0.62, 95% CI: 0.40–0.95), confirming the preventive role of overall health-conscious behavior [3]. These findings suggest that promoting a holistic healthy lifestyle may serve as an effective indirect strategy for HIV prevention.

Social factors also played a crucial role in influencing behavior and attitudes toward HIV. The study found that 46% of participants expressed some level of stigma toward individuals living with HIV, including reluctance to engage in close social interaction. This indicates that misinformation and negative societal attitudes remain significant barriers to effective HIV prevention. Additionally, 39% of respondents reported that they would avoid HIV testing due to fear of social judgment, discrimination, or breach of confidentiality. Statistical analysis confirmed a strong association between perceived stigma and reduced likelihood of HIV testing ($p < 0.01$), suggesting that stigma directly hinders early diagnosis and intervention efforts [4]. Peer influence emerged as another important determinant of behavior. Approximately 31% of participants reported that their lifestyle choices and behaviors were influenced by friends or social groups. Individuals exposed to peer pressure were more likely to engage in unsafe sexual practices, substance use, and other risk-related behaviors compared to those who demonstrated higher levels of autonomy and personal decision-making ($p < 0.05$) [5]. This highlights the importance of social environment and peer networks in shaping youth behavior and emphasizes the potential effectiveness of peer-led educational interventions.

Table 1. Distribution of Knowledge, Lifestyle Behaviors, and Social Factors among Participants

Parameter	Number (n=200)	Percentage (%)
Knowledge Level		
High knowledge	76	38.0
Moderate knowledge	84	42.0
Low knowledge	40	20.0
Risk Behaviors		
Engaged in risky behavior	68	34.0
No risky behavior	132	66.0
Inconsistent condom use	42	21.0
Substance-related risky decisions	26	13.0



Parameter	Number (n=200)	Percentage (%)
Lifestyle Factors		
Regular physical activity	98	49.0
Irregular/no physical activity	102	51.0
Healthy lifestyle adherence	90	45.0
Poor lifestyle habits	110	55.0
Social Factors		
Presence of stigma	92	46.0
Fear of HIV testing	78	39.0
Peer influence on behavior	62	31.0

Overall, the findings indicate that insufficient knowledge, unhealthy lifestyle practices, and adverse social influences significantly contribute to the spread of HIV among young people. At the same time, higher awareness levels and adherence to a healthy lifestyle were associated with reduced engagement in risky behaviors. Social stigma and peer pressure, however, continue to increase vulnerability among youth populations. These results emphasize the necessity of comprehensive prevention strategies that integrate education, behavioral interventions, and social support systems to effectively reduce HIV transmission among young individuals.

DISCUSSION

The findings of this study provide important insights into the complex interaction between social factors, lifestyle behaviors, and the spread of HIV/AIDS among young people. The results confirm that HIV transmission in youth populations is not solely a medical issue but is strongly influenced by educational, behavioral, and socio-cultural determinants. This highlights the necessity of adopting a multidisciplinary approach to HIV prevention that integrates health education, social support, and behavioral change strategies. One of the most significant findings of this study is the relatively low level of comprehensive knowledge about HIV among participants. Although a portion of respondents demonstrated moderate to high awareness, a considerable percentage still held misconceptions regarding transmission routes. Similar findings have been reported in previous studies, which indicate that misinformation remains a major barrier to effective HIV prevention among adolescents and young adults [1]. The observed association between education level and HIV knowledge further emphasizes the critical role of formal and informal education systems in improving awareness and promoting safe behaviors.



The study also revealed a strong relationship between knowledge levels and engagement in risky behaviors. Participants with lower awareness were significantly more likely to engage in unsafe sexual practices and substance use. This finding is consistent with earlier research demonstrating that insufficient knowledge increases vulnerability to HIV infection due to poor decision-making and lack of preventive practices [2]. Therefore, enhancing knowledge through targeted educational interventions can play a crucial role in reducing high-risk behaviors among youth. Another key aspect of this study is the role of lifestyle factors in influencing HIV risk. The results showed that individuals who adhered to a healthy lifestyle, including regular physical activity and responsible health behaviors, were less likely to engage in risky practices. This supports the concept that a healthy lifestyle extends beyond physical well-being and includes psychological and behavioral components that contribute to risk avoidance [3]. Promoting healthy lifestyle habits may thus serve as an indirect but effective strategy for HIV prevention.

Social stigma emerged as a significant barrier to HIV prevention and control. A substantial proportion of participants expressed negative attitudes toward individuals living with HIV and reported reluctance to undergo HIV testing due to fear of discrimination. These findings are in line with global evidence suggesting that stigma and discrimination discourage individuals from seeking testing, treatment, and support services [4]. Addressing stigma through community education, awareness campaigns, and policy interventions is essential to improve early diagnosis and reduce the spread of infection. Furthermore, the influence of peer groups on youth behavior was clearly demonstrated in this study. Participants who reported strong peer influence were more likely to engage in risky behaviors, highlighting the importance of social environment in shaping individual decisions. This finding aligns with previous studies that emphasize the role of peer pressure in adolescent risk-taking behaviors [5]. Consequently, peer-led education programs and youth engagement initiatives may be particularly effective in promoting positive behavioral changes.

The results also suggest that fear of social judgment significantly limits the willingness of young individuals to undergo HIV testing. Early detection is a critical component of HIV prevention, as it allows timely initiation of treatment and reduces the risk of transmission. Therefore, creating a supportive and non-discriminatory environment is essential to encourage voluntary testing and improve health outcomes [6]. Despite the valuable findings, this study has several limitations. First, the cross-sectional design does not allow for establishing causal relationships between variables. Second, the data were based on self-reported responses, which may be subject to recall bias or social desirability bias. Third, the study was conducted in selected مناطق, which may limit the generalizability of the results to broader populations. Future research should include longitudinal designs and larger, more diverse samples to validate and expand upon these findings.

In conclusion, this study highlights that the spread of HIV among young people is influenced by a combination of insufficient knowledge, unhealthy lifestyle behaviors, and negative social factors such as stigma and peer pressure. Effective prevention strategies should focus on improving education, promoting healthy lifestyles, reducing stigma, and strengthening social support systems. A comprehensive and integrated approach is essential to address the multifaceted nature of HIV transmission in youth populations.

CONCLUSION



In conclusion, the present study demonstrates that the spread of HIV/AIDS among young people is influenced by a complex combination of social, behavioral, and educational factors. The findings indicate that insufficient knowledge about HIV transmission and prevention, along with the persistence of misconceptions, significantly increases the likelihood of engaging in high-risk behaviors. At the same time, unhealthy lifestyle practices and exposure to negative social influences, such as peer pressure, further contribute to the vulnerability of youth populations. The study also highlights the protective role of a healthy lifestyle, showing that individuals who maintain responsible behaviors, regular physical activity, and health awareness are less likely to engage in risky practices. In addition, social stigma and fear of discrimination were identified as major barriers to HIV testing and early diagnosis, which remain critical components in controlling the spread of the infection. These results emphasize the importance of implementing comprehensive prevention strategies that integrate health education, behavioral interventions, and social support mechanisms. Improving awareness, promoting safe and healthy lifestyles, reducing stigma, and encouraging voluntary HIV testing are essential steps toward minimizing the transmission of HIV among young people. Overall, addressing the issue requires a multidisciplinary and long-term approach involving healthcare systems, educational institutions, and community organizations. Strengthening these efforts will contribute to more effective prevention, early detection, and ultimately, the reduction of HIV incidence in youth populations.

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