



Empowering Girls with HIV Prevention Skills in Low-Resource Schools: A Review

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Article Info:

Article History:

Received 28 Sep 2024

Reviewed 03 Nov 2024

Accepted 26 Nov 2024

Published 15 Dec 2024

Cite this article as:

Obeagu EI, Empowering Girls with HIV Prevention Skills in Low-Resource Schools: A Review, Asian Journal of Dental and Health Sciences. 2024; 4(3):63-67

DOI: <http://dx.doi.org/10.22270/ajdhs.v4i4.104>

Abstract

HIV remains a significant health challenge globally, and adolescent girls in low-resource settings are disproportionately affected due to factors such as limited access to sexual health education and gender inequality. Empowering girls with HIV prevention skills in schools, particularly in low-resource areas, is a crucial strategy in reducing their vulnerability to HIV. This review explores the importance of HIV prevention education in schools and how tailored approaches can effectively empower girls with the knowledge and skills necessary to protect themselves from HIV. By focusing on the role of education in these communities, this article discusses how schools can act as key platforms for delivering HIV prevention messages and resources. The article identifies several barriers to effective HIV prevention education, including lack of trained teachers, inadequate educational materials, and socio-cultural stigmas surrounding discussions of sexual health. It also highlights the importance of involving the broader community, including parents, local leaders, and healthcare providers, to support and reinforce HIV education efforts. Strategies such as integrating HIV prevention into the school curriculum, training educators, and promoting peer-led initiatives are explored as effective ways to reach girls and provide them with practical skills for HIV prevention.

Keywords: HIV prevention, girls' empowerment, low-resource schools, education, sexual health

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Introduction

HIV continues to be a global health issue, with adolescent girls in low-resource settings particularly vulnerable to infection. Sub-Saharan Africa remains the epicenter of the HIV epidemic, where young girls and women are disproportionately affected. According to the World Health Organization, adolescent girls are more likely to be HIV-positive than their male counterparts due to a combination of biological, social, and cultural factors. Early sexual initiation, gender-based violence, unequal power dynamics in relationships, and limited access to sexual health education all contribute to the heightened vulnerability of girls to HIV. In many low-resource areas, schools represent one of the few settings where young people can access critical sexual health information, making them an essential platform for HIV prevention efforts.¹⁻² In these regions, low-resource schools often lack the necessary infrastructure and trained personnel to deliver comprehensive sexual and reproductive health education. This gap in education, combined with socio-cultural taboos around discussing sexual health, further exacerbates the challenges faced by adolescent girls in making informed decisions about their sexual health. For girls who have limited access to healthcare and who

are at higher risk of HIV due to gender inequality, school-based HIV prevention programs can play a transformative role. Empowering girls with the knowledge and skills to prevent HIV is not just a health intervention, but a critical step towards achieving gender equality and social empowerment.³⁻⁴ Given the specific needs of girls in these environments, HIV prevention education must be tailored to address the unique challenges they face. An effective HIV prevention program should not only educate girls about the virus and how it is transmitted, but also teach them how to negotiate safe sexual practices, understand the importance of condom use, and access HIV testing and treatment. Additionally, it must take into account cultural sensitivities, social norms, and local barriers that may affect girls' ability to engage with such information. Schools in low-resource settings must be equipped with the resources and training to provide this education in a safe, supportive environment.⁵

The importance of HIV prevention education in low-resource schools cannot be overstated. Evidence shows that education significantly reduces the risk of HIV transmission by increasing awareness, promoting safer sexual behaviors, and improving access to prevention and care services. For girls, such education can also

reduce the power imbalances that often exist in relationships and help them make empowered choices regarding their sexual health. School-based programs provide an opportunity to reach a large number of girls at a crucial age, equipping them with the skills to protect themselves from HIV and other sexually transmitted infections (STIs), as well as the knowledge to challenge harmful gender norms and societal expectations.⁶⁻⁷ However, despite the potential of school-based HIV prevention programs, several challenges exist in implementing effective education in low-resource settings. These challenges include insufficient funding, lack of teacher training, and the prevalence of stigmatizing attitudes towards sexual health education. Moreover, in many communities, parents and local leaders may resist the idea of HIV education for girls due to cultural norms surrounding sexuality and gender roles. These obstacles require innovative solutions, such as community involvement, teacher professional development, and the use of peer education models to ensure that HIV prevention messages reach girls in an accessible and meaningful way.⁸⁻⁹

The Importance of HIV Prevention Education for Girls

HIV prevention education for girls is essential, particularly in low-resource settings where girls are often at higher risk of HIV infection due to a variety of socio-economic and cultural factors. Early sexual debut, limited access to healthcare, and gender-based violence are just a few of the key factors contributing to the vulnerability of girls to HIV. Without proper education, girls may not have the knowledge or resources to protect themselves from HIV, which can lead to life-altering consequences. Providing HIV prevention education equips girls with the knowledge and skills to reduce their risk, make informed decisions, and ultimately safeguard their sexual health. In many communities, school is one of the few places where girls can access such education, making it an ideal setting for HIV prevention programs.¹⁰⁻¹¹ A primary benefit of HIV prevention education is that it empowers girls by increasing their awareness of HIV transmission and the preventive measures they can take. Teaching girls about the virus—how it spreads, the risks of unprotected sex, and the importance of condom use—ensures they understand the importance of taking protective steps. Equally important is educating them about their rights, including the right to refuse sex or to ask a partner to use protection, which is a critical aspect of preventing HIV. Girls who are educated about HIV are more likely to delay sexual initiation, practice safer sex, and seek out HIV testing and treatment, which in turn can reduce transmission rates within the broader community.¹²⁻¹³ Beyond just knowledge, HIV prevention education fosters a sense of empowerment. When girls understand their sexual health, they are more likely to make decisions that protect their well-being. Empowerment also includes the ability to negotiate safer sexual practices, refuse unwanted sexual advances, and advocate for their health within relationships. In many low-resource settings, where gender inequality and power imbalances often prevail, HIV education can

challenge harmful gender norms and practices that place girls at greater risk. For example, in societies where girls may be expected to marry early or accept sexual advances from older men, education helps them recognize their right to make their own choices about when and how to engage in sexual activity. This can contribute to reducing early marriages, reducing gender-based violence, and decreasing the rates of HIV among young girls.¹⁴

Challenges in Delivering HIV Prevention Education in Low-Resource Schools

Delivering effective HIV prevention education in low-resource schools presents a range of challenges, many of which stem from insufficient infrastructure, limited funding, and sociocultural factors. These schools often lack the necessary resources to provide comprehensive sexual and reproductive health education. Teachers may not have access to up-to-date educational materials or training, hindering their ability to deliver accurate, engaging, and age-appropriate HIV prevention messages. In some cases, teachers themselves may feel uncomfortable discussing topics related to sexuality, HIV, and reproductive health, especially in communities where these subjects are considered taboo or culturally sensitive. This discomfort can further limit the effectiveness of HIV prevention efforts and leave girls without the critical knowledge they need to protect themselves from HIV.¹⁵⁻¹⁷ Another significant barrier to delivering HIV prevention education in low-resource settings is the lack of adequate teacher training. In many schools, educators are not equipped with the skills to teach sensitive topics like HIV prevention, consent, or sexual health. Many teachers may not have specialized knowledge in sexual and reproductive health, making it difficult for them to address students' questions or concerns accurately. Additionally, teacher training programs may not prioritize HIV education, leaving educators unprepared to discuss these topics confidently and comprehensively. This lack of training can undermine the quality of education and perpetuate misinformation or stigma surrounding HIV, which can discourage girls from engaging with HIV prevention messages or seeking help if they are at risk.¹⁸⁻¹⁹

Sociocultural and societal norms also play a critical role in hindering the delivery of HIV prevention education in many low-resource settings. In many cultures, there is resistance to discussing sexual health openly, particularly with young girls. Parents and community leaders may oppose HIV education programs in schools, fearing they will encourage sexual activity or challenge traditional gender roles. In societies where early marriage, sexual violence, and gender inequality are common, the reluctance to engage in discussions about HIV prevention can be even more pronounced. The stigma associated with HIV and the belief that it is a "taboo" subject often results in silence around sexual health, further isolating girls and leaving them vulnerable. Overcoming these cultural barriers requires not only educational reform but also community involvement and sensitivity to local beliefs and values.²⁰⁻²¹ Another challenge is the limited availability of

healthcare services and support structures within low-resource communities. Even if HIV prevention education is delivered successfully in schools, girls may still face difficulties in accessing HIV-related healthcare, such as testing, condoms, and treatment. In many rural or underserved areas, healthcare facilities may be far away, understaffed, or ill-equipped to provide adequate services for adolescents. Girls may also face financial barriers that prevent them from seeking medical help or purchasing necessary prevention tools, such as condoms. In the absence of adequate healthcare infrastructure, education alone may not be enough to reduce HIV risk. Integration of healthcare services with HIV education in schools is crucial to ensure that girls have access to the necessary resources for HIV prevention and care.²²⁻²³

Additionally, low-resource schools often struggle with overcrowded classrooms, limited time, and a lack of structured curricula, making it difficult to adequately address HIV prevention. Many schools are forced to prioritize subjects with national examination requirements, leaving little room for comprehensive sexual and reproductive health education. Even when HIV prevention is included in the curriculum, it may only be addressed in a superficial way, which does not allow for in-depth discussions or skills-building on topics such as condom use, safe sexual practices, or negotiating consent. This can result in incomplete education that does not fully equip girls to protect themselves from HIV or navigate the complexities of sexual health and relationships.²⁴⁻²⁵ Finally, financial constraints are a major obstacle to the effective delivery of HIV prevention education in low-resource schools. Governments in many low-resource settings face tight budgets and may not prioritize funding for sexual health education programs, leaving schools to rely on international donors or non-governmental organizations (NGOs) for support. While these partnerships can be valuable, they are often inconsistent or limited in scope. This lack of sustained funding can lead to the underdevelopment of HIV prevention programs, including a lack of trained personnel, educational materials, and outreach efforts. Without adequate funding, schools may struggle to implement or maintain HIV prevention initiatives over the long term, reducing their overall impact.²⁶⁻²⁷

Strategies for Empowering Girls with HIV Prevention Skills

Empowering girls with HIV prevention skills in low-resource schools requires a comprehensive, culturally sensitive, and multi-faceted approach that takes into account the unique challenges they face. Several strategies can be employed to effectively equip girls with the knowledge, skills, and confidence needed to protect themselves from HIV. These strategies include enhancing the curriculum to provide accurate, age-appropriate information, building a supportive environment that fosters open discussion, and utilizing peer education programs to create lasting impact.²⁸

1. Curriculum Enhancement and Teacher Training

A key strategy for empowering girls with HIV prevention skills is to ensure that the curriculum in schools includes comprehensive, accurate, and age-appropriate HIV education. The curriculum should address not only the basics of HIV transmission but also skills-based education that enables girls to practice safer sexual behaviors. This includes lessons on condom use, the importance of HIV testing, and how to negotiate safer sex. It should also cover the social and emotional aspects of sexual health, such as recognizing coercion, understanding consent, and developing healthy relationships. To make this possible, teachers need proper training in delivering these sensitive topics. Teacher training programs should focus on equipping educators with the knowledge and confidence to discuss sexual health openly and address any questions or concerns that arise. Trained teachers are better able to create a safe and supportive classroom environment where girls feel comfortable asking questions and engaging with the material.²⁹

2. Peer Education Programs

Peer education is another powerful strategy to empower girls with HIV prevention skills. Peer educators are typically older or more knowledgeable students who serve as role models and educators for their younger peers. Peer education programs can be effective in overcoming cultural and social barriers by making HIV prevention education more relatable and accessible. Girls are more likely to engage with and trust information delivered by their peers, especially when it comes to topics related to sexuality and health. Peer educators can lead discussions, organize awareness campaigns, and facilitate group activities on HIV prevention, making the learning process more interactive and engaging. Involving peer educators also fosters leadership and communication skills among older girls, which they can carry forward into their communities. Additionally, peer education programs create a sense of community and support, helping to reduce stigma and encourage collective action.³⁰

3. Community and Parental Involvement

Community and parental involvement plays a crucial role in the success of HIV prevention education programs for girls. In many low-resource settings, there may be resistance to HIV education due to cultural norms, misconceptions about sexual health, or concerns about encouraging sexual activity. Engaging parents and community leaders early in the process can help address these concerns and build support for HIV education in schools. Schools should actively involve parents in awareness campaigns, meetings, and workshops, where they can learn about the importance of HIV prevention education and how to support their daughters in making informed decisions. Community leaders, including religious leaders, local health professionals, and respected elders, can also help dispel myths and promote the importance of educating girls about HIV. By fostering a broader community-based approach, HIV prevention education becomes a shared

responsibility that strengthens both family and school support for girls' health.³¹

4. Safe Spaces and Gender-Sensitive Education

Creating safe spaces in schools where girls can discuss HIV prevention openly and without judgment is another critical strategy. These spaces allow girls to ask questions, express concerns, and receive guidance on sexual health in a non-threatening and supportive environment. Girls are more likely to engage in HIV prevention education when they feel safe to do so. This includes having teachers who are empathetic and non-judgmental, as well as school policies that protect students from discrimination and harassment related to their sexual health. Moreover, HIV education should be gender-sensitive, addressing the specific challenges girls face in relation to HIV prevention, such as unequal power dynamics in relationships, gender-based violence, and early sexual debut. Gender-sensitive education helps girls understand not only the biological aspects of HIV prevention but also the social and cultural factors that influence their risk.³²

5. Access to Healthcare and Prevention Tools

While education is essential, it must be paired with access to healthcare services and prevention tools. Girls need access to condoms, HIV testing, and treatment services to complement the knowledge gained from HIV education. Schools can partner with local health services to provide HIV testing and counseling services on-site or ensure that girls are aware of nearby health centers where they can seek care. Additionally, schools should make condoms available to students in a discreet and accessible manner, ensuring that girls can practice safer sex in real-life situations. Educational programs should also highlight the importance of regular HIV testing, both for prevention and early detection, as well as the availability of treatment options for those living with HIV. By providing these practical tools alongside education, schools ensure that girls are not only informed but also empowered to take action to protect their sexual health.³³

6. Digital and Multimedia Education

In an increasingly digital world, incorporating technology into HIV prevention education can enhance its reach and effectiveness. Mobile phones, social media platforms, and multimedia resources such as videos and online courses can be powerful tools in delivering HIV prevention messages to girls. In areas where traditional school resources are limited, digital education can bridge gaps by offering interactive lessons, virtual counseling, and peer support networks. These platforms can also provide girls with access to reliable, up-to-date information on HIV prevention, sexual health, and gender equality. However, it is important to ensure that digital content is culturally appropriate, safe, and accessible to all girls, particularly in communities with limited internet access or where the digital divide is prominent. By integrating digital education into school-based HIV prevention programs, schools can reach a wider audience and offer continuous support beyond the classroom.³¹⁻³³

Conclusion

Empowering girls with HIV prevention skills in low-resource schools is an essential step towards reducing the vulnerability of young girls to HIV and promoting their sexual and reproductive health. Through comprehensive, culturally sensitive education that addresses both the biological and social aspects of HIV, girls can be equipped with the knowledge and skills needed to protect themselves from HIV transmission. Strategies such as curriculum enhancement, teacher training, peer education programs, and creating safe spaces for open discussion are key to ensuring that girls receive the education and support they need to navigate the complexities of sexual health.

Conflict of Interest: Author declares no potential conflict of interest with respect to the contents, authorship, and/or publication of this article.

Source of Support: Nil

Funding: The authors declared that this study has received no financial support.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data supporting in this paper are available in the cited references.

Ethics approval: Not applicable.

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