
**INTERNATIONAL JOURNAL OF CURRENT RESEARCH IN
CHEMISTRY AND PHARMACEUTICAL SCIENCES**

(p-ISSN: 2348-5213; e-ISSN: 2348-5221)

www.ijcrps.com

(A Peer Reviewed, Referred, Indexed and Open Access Journal)

DOI: 10.22192/ijcrps

Coden: IJCROO(USA)

Volume 12, Issue 3- 2025

Review Article



DOI: <http://dx.doi.org/10.22192/ijcrps.2025.12.04.004>

E-Mentorship for HIV Awareness: Engaging Adolescent Women in the Digital Age

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Abstract

E-mentorship has emerged as a transformative approach to promoting HIV awareness among adolescent women in the digital age. This review explores the potential of e-mentorship programs to engage young women in HIV prevention, utilizing digital platforms to deliver interactive and accessible health education. With the increasing reliance on technology, e-mentorship offers a unique opportunity to reach adolescent women, particularly those in underserved or hard-to-reach communities, by providing tailored support, peer interactions, and accurate health information. The accessibility, flexibility, and anonymity provided by digital platforms make e-mentorship an effective tool for fostering open discussions about HIV prevention, sexual health, and relationships. Despite its potential, e-mentorship faces several challenges, including the digital divide, privacy concerns, and the need for well-trained mentors. Access to technology and the internet remains uneven, limiting the reach of these programs,

particularly in rural or low-income areas. Additionally, ensuring the safety and confidentiality of online interactions is crucial to protect young women from cyberbullying or exploitation. To address these challenges, it is important to develop secure platforms, train mentors with expertise in HIV prevention, and ensure that the programs are culturally sensitive and aligned with the needs of the target audience.

Keywords: E-Mentorship, HIV Awareness, Adolescent Women, Digital Age, Health Education

Introduction

In the digital era, the way information is disseminated and accessed has undergone a dramatic shift, particularly among adolescents. With the growing influence of smartphones, social media, and online platforms, digital spaces have become a primary mode of communication, interaction, and education for young people. This shift presents a unique opportunity to leverage technology in addressing public health issues, such as HIV prevention, by utilizing innovative tools like e-mentorship. E-mentorship, defined as a mentorship process facilitated through digital platforms, offers an accessible, scalable, and dynamic way to engage adolescent women in HIV awareness and prevention. Through these digital spaces, young women can access accurate health information, receive guidance, and build relationships with mentors, all of which are crucial for fostering informed health decisions.¹⁻² Adolescent women face unique challenges in accessing HIV-related information, especially in regions where cultural taboos, stigma, and a lack of adequate sexual health education prevent open conversations. In many parts of the world, including rural and underserved areas, traditional health education programs often fail to reach young people or are limited in scope and effectiveness. E-mentorship offers a solution to these barriers by providing a confidential, accessible platform for adolescent women to learn about HIV prevention in a safe and non-judgmental environment. Mentors, who may include healthcare professionals, peers, or community leaders, can offer guidance on topics such as safe sex practices, HIV testing, and healthy relationships, while also addressing emotional and psychological aspects of sexual health. This approach reduces the risks of HIV transmission by

empowering young women with the knowledge and confidence to make informed decisions about their sexual health.³⁻⁵ The benefits of e-mentorship in HIV awareness extend beyond just education. Digital platforms allow for greater flexibility, enabling young women to access resources and engage in mentorship programs at their convenience. This flexibility is especially valuable for adolescents who may have limited access to in-person healthcare or educational opportunities due to geographic or socio-economic constraints. Furthermore, e-mentorship fosters a sense of community and peer support, enabling young women to connect with others who may be facing similar challenges. Peer-led mentorship, where individuals with similar lived experiences provide guidance, can be particularly effective in breaking down barriers and building trust, as adolescents often relate better to mentors who understand their concerns and realities.⁶⁻⁷

Benefits of E-Mentorship for HIV Awareness

E-mentorship presents numerous benefits for HIV awareness, particularly for adolescent women who face unique challenges in accessing accurate and comprehensive sexual health education. One of the primary advantages is accessibility. With the increasing use of smartphones and internet connectivity across the globe, e-mentorship programs allow young women to access HIV education at their convenience, regardless of their geographic location. This is especially beneficial for those living in rural or marginalized communities where HIV prevention programs may be limited or difficult to access. By removing physical barriers to education, e-mentorship ensures that adolescent women, regardless of their circumstances, have the opportunity to receive critical HIV-related information and guidance.⁸⁻¹⁰

Another significant benefit of e-mentorship is the anonymity it provides. Many adolescent women face societal or familial stigma when discussing sensitive topics such as sexual health, HIV prevention, or safe sex practices. E-mentorship platforms provide a confidential space where young women can ask questions and discuss concerns without fear of judgment or exposure. This anonymity encourages more open and honest conversations about issues that may otherwise be silenced due to cultural taboos or personal discomfort. The ability to interact with mentors or peers online, without the fear of face-to-face embarrassment, makes it easier for young women to seek advice and clarify misconceptions about HIV and sexual health.¹¹⁻¹³

E-mentorship also fosters peer-to-peer learning and support, which is particularly impactful in youth education. Peer mentorship programs allow adolescents to connect with mentors or fellow young women who share similar experiences or backgrounds. This relatability builds trust and creates an environment where mentees feel understood and supported. Peer-led learning has been shown to be effective in increasing knowledge retention and promoting behavior change, as young people are often more likely to engage with and internalize information delivered by someone who they perceive as being like them. Through e-mentorship platforms, adolescent women can share their experiences, learn from others, and provide mutual support, all of which contribute to their overall understanding of HIV prevention.¹⁴⁻¹⁵ Moreover, e-mentorship enables the delivery of interactive and personalized learning experiences. Unlike traditional classroom settings, digital platforms allow for the integration of multimedia tools, such as videos, infographics, quizzes, and interactive webinars. These engaging tools make learning about HIV prevention more dynamic and relatable for young women. The flexibility of digital platforms also allows for personalized guidance, where mentors can tailor their advice to the specific needs and concerns of the mentee. This personalized approach helps address the diverse challenges and questions that young women may face, ensuring that the information is relevant and

applicable to their individual lives.¹⁶⁻¹⁷ Lastly, e-mentorship programs are highly scalable, enabling them to reach large numbers of adolescent women with minimal resource requirements. Traditional face-to-face mentorship or HIV education programs may be limited by physical space, time constraints, or the availability of trained professionals. However, digital platforms can accommodate many mentees simultaneously, expanding the reach of HIV education to a broader audience. With the right infrastructure, e-mentorship programs can be implemented on a global scale, offering HIV awareness to young women in various parts of the world, including those who may be otherwise left out of traditional educational efforts.¹⁸⁻¹⁹

Challenges of Implementing E-Mentorship for HIV Awareness

While e-mentorship holds great promise for HIV awareness, its implementation is not without challenges. One of the primary obstacles is the digital divide, which refers to the unequal access to technology and the internet. In many regions, especially rural or low-income areas, reliable internet connectivity and access to smartphones or computers remain limited. This digital gap can exclude large segments of the adolescent population from participating in e-mentorship programs, hindering the effectiveness and reach of such initiatives. Even in more developed regions, some young women may not have access to the necessary devices due to economic constraints, making it difficult for these programs to achieve full inclusivity. Without addressing the issue of digital access, the potential of e-mentorship to reach all adolescent women may be severely restricted.²⁰⁻²¹ Another significant challenge is the privacy and security concerns associated with online platforms. The anonymity that digital platforms provide is a double-edged sword—it allows for open and honest communication about sensitive topics like sexual health and HIV prevention, but it also opens the door to potential risks such as cyberbullying, online exploitation, or the unauthorized sharing of personal information. Adolescent women are particularly vulnerable to online harassment, and their safety must be a priority in any e-mentorship

program. Ensuring that mentors and mentees are protected from these risks requires robust privacy measures, secure platforms, and strict adherence to digital safety protocols. Without these safeguards, participants may be reluctant to engage, or worse, may be exposed to harmful situations.²²⁻²³

Training and preparation of mentors is another challenge in the effective implementation of e-mentorship programs. Mentors must be equipped not only with a thorough understanding of HIV prevention and sexual health education but also with the skills necessary to navigate online communication effectively. Digital platforms often lack the nuances of face-to-face interactions, making it harder for mentors to establish rapport and trust with their mentees. Mentors must be trained in maintaining professional boundaries, providing emotional support, and handling sensitive topics online. Additionally, there is a need for continuous supervision and feedback mechanisms to ensure that mentors are providing accurate, culturally appropriate, and empathetic guidance. Without proper training, mentors may unintentionally provide harmful advice or fail to engage effectively with their mentees, undermining the goals of the program.²⁴⁻²⁵ The lack of personalized and culturally relevant content is another barrier to the success of e-mentorship for HIV awareness. Adolescents from different cultural backgrounds may face varying risks and challenges related to HIV, and a one-size-fits-all approach may not be effective. Without tailoring content to the local context, including cultural, social, and familial factors, e-mentorship programs may fail to address the specific needs of the target audience. Additionally, health education programs that do not take into account the language preferences, literacy levels, and regional HIV prevalence may struggle to resonate with young women and may not produce the desired behavioral changes. Developing culturally sensitive, context-specific materials is crucial for ensuring the program's relevance and success.²⁶ Finally, sustainability and funding are significant challenges in the long-term success of e-mentorship programs. While digital platforms can reach large numbers of individuals, maintaining these programs over time requires adequate funding

and resources. Continuous updates to technology, training for mentors, and the creation of new educational content require financial investment. In some cases, funding may be sporadic or insufficient, which can hinder the continuity and growth of the program. Additionally, there is a need for evaluation frameworks to assess the effectiveness of e-mentorship programs, and such evaluations require resources for research, data collection, and analysis. Without a sustainable funding model, the impact of e-mentorship on HIV awareness may be limited, and the program may struggle to scale or reach its full potential.²⁷

Best Practices for E-Mentorship Implementation

To ensure the successful implementation of e-mentorship programs for HIV awareness, several best practices must be followed. These best practices not only help mitigate challenges but also enhance the effectiveness and reach of e-mentorship initiatives, ensuring that they provide meaningful support to adolescent women.

1. Ensuring Access and Inclusivity:

One of the first steps in implementing e-mentorship programs is ensuring accessibility to digital platforms. Programs must consider the digital divide and adopt strategies to reach young women who may have limited access to technology. This can include providing subsidized smartphones, creating partnerships with local governments or organizations to offer internet access, or using platforms that work on low-bandwidth devices. Additionally, providing low-cost or free data packages can help make e-mentorship programs more inclusive, ensuring that cost is not a barrier to participation. It's also important to create user-friendly platforms that accommodate varying levels of digital literacy, making it easy for young women to navigate and engage in the program.²⁸

2. Prioritizing Privacy and Security:

Given the sensitive nature of HIV-related conversations, ensuring the safety and privacy of participants is paramount. Platforms used for e-mentorship must have robust security measures, such as end-to-end encryption, secure login processes, and mechanisms for reporting inappropriate behavior. Mentors and mentees should be educated about online safety, and confidentiality agreements should be in place to protect the privacy of participants. Additionally, the program should have clear guidelines for mentors on how to navigate potentially harmful situations, such as cases of cyberbullying or exposure to inappropriate content. Ensuring a secure and safe environment fosters trust, which is critical in encouraging young women to engage in open and honest discussions.²⁹

3. Providing Training and Ongoing Support for Mentors:

Mentors are the backbone of e-mentorship programs, and for these programs to be successful, mentors need to be thoroughly trained. This training should cover a variety of aspects, including HIV prevention education, communication skills for digital platforms, and how to manage sensitive discussions. Mentors should also be trained in emotional support techniques and how to guide mentees through personal issues related to HIV, sexual health, and relationships. Ongoing training and supervision are crucial to ensure that mentors remain updated on the latest information, ethical guidelines, and digital platform best practices. Continuous feedback from program coordinators will also help mentors improve their engagement and maintain high-quality interactions with their mentees.³⁰

4. Creating Culturally Relevant and Engaging Content:

For an e-mentorship program to resonate with its audience, it is essential that the content provided is both culturally relevant and engaging. HIV education should be tailored to address the specific

needs, norms, and challenges faced by adolescent women in different cultural contexts. Content should be interactive, utilizing videos, quizzes, infographics, and real-life stories to make learning about HIV prevention more engaging and relatable. Local languages, visual content, and region-specific issues should be incorporated to ensure the program's relevance and accessibility. Additionally, mentors should be sensitive to the local customs, beliefs, and values of the mentees, which can enhance the program's effectiveness and ensure that the messages delivered are well-received.³¹

5. Monitoring, Evaluation, and Feedback Mechanisms:

To ensure that the e-mentorship program is achieving its goals, it is crucial to establish strong monitoring and evaluation mechanisms. Regular assessments of the program's impact on HIV awareness and prevention behaviors should be conducted through surveys, interviews, and other forms of feedback from participants. This feedback should be used to refine and improve the program continuously. It's also important to assess mentor performance and the overall experience of mentees to identify areas for improvement. Monitoring should be designed to be transparent and inclusive, with a focus on the long-term outcomes of the program, such as increased HIV knowledge, improved preventive behaviors, and changes in attitudes toward sexual health. This approach will allow for the continual adaptation of the program to meet the evolving needs of adolescent women.³²

6. Fostering Peer-to-Peer Learning and Support:

One of the most valuable aspects of e-mentorship programs is the opportunity for peer support and peer-led learning. Encouraging mentees to share their experiences and learn from each other can help normalize HIV-related conversations and reduce stigma. By fostering a sense of community, participants feel supported in their learning journey and gain the confidence to make informed health decisions. Peer mentorship, where older or more experienced mentees support newcomers, can create a self-sustaining environment where young women

not only receive guidance but also contribute to the program's growth.³¹

7. Collaboration with Local Organizations and Stakeholders:

E-mentorship programs can be strengthened by forming partnerships with local health organizations, schools, community groups, and government agencies. These collaborations can provide additional resources, such as local mentors, health experts, and outreach opportunities, ensuring that the program aligns with the broader community's needs. By engaging local stakeholders, the program can be better integrated into existing health initiatives, making it more effective and sustainable. These partnerships can also help in raising awareness about the e-mentorship program, ensuring that more young women know about the resources available to them.³²

Conclusion

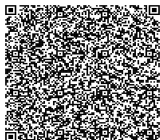
E-mentorship for HIV awareness presents a promising and innovative approach to empowering adolescent women with the knowledge and skills needed for effective HIV prevention. By offering flexible, accessible, and engaging platforms for education, e-mentorship helps bridge gaps created by physical, social, and cultural barriers. However, the successful implementation of such programs requires overcoming challenges such as digital access, privacy concerns, and the need for well-trained mentors. By following best practices, including ensuring inclusivity, prioritizing security, and providing culturally relevant content, e-mentorship programs can reach and support a diverse range of young women, empowering them to make informed decisions about their sexual health. Ultimately, when implemented effectively, e-mentorship can play a key role in reducing the HIV burden among adolescent women and contribute to creating a more informed and resilient generation.

References

1. Mark M. The international problem of HIV/AIDS in the modern world: a comprehensive review of political, economic, and social impacts. *Res Output J Public Health Med.* 2024; 42:47-52.
2. Rodrigo C, Rajapakse S. HIV, poverty and women. *International Health.* 2010; 2(1):9-16.
3. Bekker LG, Alleyne G, Baral S, Cepeda J, Daskalakis D, Dowdy D, Dybul M, Eholie S, Esom K, Garnett G, Grimsrud A. Advancing global health and strengthening the HIV response in the era of the Sustainable Development Goals: the International AIDS Society—Lancet Commission. *The Lancet.* 2018; 392(10144):312-358.
4. Idele P, Gillespie A, Porth T, Suzuki C, Mahy M, Kasedde S, Luo C. Epidemiology of HIV and AIDS among adolescents: current status, inequities, and data gaps. *JAIDS Journal of Acquired Immune Deficiency Syndromes.* 2014; 66:S144-153.
5. Zhang J, Ma B, Han X, Ding S, Li Y. Global, regional, and national burdens of HIV and other sexually transmitted infections in adolescents and young adults aged 10–24 years from 1990 to 2019: a trend analysis based on the Global Burden of Disease Study 2019. *The Lancet Child & Adolescent Health.* 2022; 6(11):763-776.
6. Saul J, Bachman G, Allen S, Toiv NF, Cooney C, Beamon TA. The DREAMS core package of interventions: a comprehensive approach to preventing HIV among adolescent girls and young women. *PloS one.* 2018;13(12):e0208167.
7. Obeagu EI, Obeagu GU. CD8 Dynamics in HIV Infection: A Synoptic Review. *Elite Journal of Immunology,* 2024; 2(1): 1-13
8. Obeagu EI, Obeagu GU. Implications of B Lymphocyte Dysfunction in HIV/AIDS. *Elite Journal of Immunology,* 2024; 2(1): 34-46

9. Echefu SN, Udosen JE, Akwiwu EC, Akpotuzor JO, Obeagu EI. Effect of Dolutegravir regimen against other regimens on some hematological parameters, CD4 count and viral load of people living with HIV infection in South Eastern Nigeria. *Medicine*. 2023; 102(47):e35910.
10. Njenga R, Shilabukha K. Secondary school life skills education and students' sexual reproductive health in Kenya: Case Study of Ruiru Sub-County. *Gender statistics for evidence-based policies on women's economic empowerment, health and gender-based violence*. 2017:118-131.
11. Visser MJ. Life skills training as HIV/AIDS preventive strategy in secondary schools: evaluation of a large-scale implementation process. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*. 2005; 2(1):203-216.
12. Botvin GJ, Griffin KW. Life skills training: preventing substance misuse by enhancing individual and social competence. *New directions for youth development*. 2014; 2014(141):57-65.
13. Obeagu EI, Obeagu GU. Platelet-Driven Modulation of HIV: Unraveling Interactions and Implications. *Journal home page*: <http://www.journalijar.com>. 2024;12(01).
14. Obeagu EI, Anyiam AF, Obeagu GU. Unveiling B Cell Mediated Immunity in HIV Infection: Insights, Challenges, and Potential Therapeutic Avenues. *Elite Journal of HIV*, 2024;2(1): 1-15
15. Obeagu EI. Understanding the Intersection of Highly Active Antiretroviral Therapy and Platelets in HIV Patients: A Review. *Elite Journal of Haematology*. 2024; 2(3):111-117.
16. Lwamba E, Shisler S, Ridlehoover W, Kupfer M, Tshabalala N, Nduku P, Langer L, Grant S, Sonnenfeld A, Anda D, Eyers J. Strengthening women's empowerment and gender equality in fragile contexts towards peaceful and inclusive societies: A systematic review and meta-analysis. *Campbell systematic reviews*. 2022; 18(1):e1214.
17. Lwamba E, Ridlehoover W, Kupfer M, Shisler S, Sonnenfeld A, Langer L, Eyers J, Grant S, Barooah B. PROTOCOL: Strengthening women's empowerment and gender equality in fragile contexts towards peaceful and inclusive societies: A systematic review and meta-analysis. *Campbell Systematic Reviews*. 2021; 17(3):e1180.
18. Chi X, Hawk ST, Winter S, Meeus W. The effect of comprehensive sexual education program on sexual health knowledge and sexual attitude among college students in Southwest China. *Asia Pacific Journal of Public Health*. 2015; 27(2):NP2049-2066.
19. Akuiyibo S, Anyanti J, Idogho O, Piot S, Amoo B, Nwankwo N, Anosike N. Impact of peer education on sexual health knowledge among adolescents and young persons in two North Western states of Nigeria. *Reproductive health*. 2021; 18:1-8.
20. Hamdanieh M, Ftouni L, Al Jardali BA, Ftouni R, Rawas C, Ghotmi M, El Zein MH, Ghazi S, Malas S. Assessment of sexual and reproductive health knowledge and awareness among single unmarried women living in Lebanon: a cross-sectional study. *Reproductive Health*. 2021; 18:1-2.
21. Anyiam AF, Arinze-Anyiam OC, Ironde EA, Obeagu EI. Distribution of ABO and rhesus blood grouping with HIV infection among blood donors in Ekiti State Nigeria. *Medicine*. 2023; 102(47):e36342.
22. Obeagu EI, Obeagu GU, Buhari HA, Umar AI. Hematocrit Variations in HIV Patients Co-infected with Malaria: A Comprehensive Review. *International Journal of Innovative and Applied Research*, 2024; 12 (1): 12-26
23. Obeagu EI, Obeagu GU. Assessing Platelet Functionality in HIV Patients Receiving Antiretroviral Therapy: Implications for Risk Assessment. *Elite Journal of HIV*, 2024; 2(3): 14-26
24. Ifeanyi OE, Uzoma OG, Stella EI, Chinedum OK, Abum SC. Vitamin D and insulin resistance in HIV sero positive individuals in Umudike. *Int. J. Curr. Res. Med. Sci*. 2018;4(2):104-8.

25. Najjuma SM, Yates HT. Economic empowerment for enhanced health equity: A qualitative study of women living with HIV in Wakiso District, Uganda. *Affilia*. 2024; 39(4):644-663.
26. Campbell C, Scott K, Nhamo M, Nyamukapa C, Madanhire C, Skovdal M, Sherr L, Gregson S. Social capital and HIV competent communities: the role of community groups in managing HIV/AIDS in rural Zimbabwe. *AIDS care*. 2013; 25(sup1):S114-122.
27. Bluthenthal RN, Palar K, Mendel P, Kanouse DE, Corbin DE, Derosé KP. Attitudes and beliefs related to HIV/AIDS in urban religious congregations: Barriers and opportunities for HIV-related interventions. *Social science & medicine*. 2012; 74(10):1520-1527.
28. Wagner C, Gossett K, Hasnain M, Linsk N, Rivero R. Integration of the national HIV curriculum in medicine, nursing, and pharmacy programs in the United States. *BMC Medical Education*. 2025; 25(1):1-0.
29. Feyissa GT, Woldie M, Munn Z, Lockwood C. Exploration of facilitators and barriers to the implementation of a guideline to reduce HIV-related stigma and discrimination in the Ethiopian healthcare settings: A descriptive qualitative study. *PLoS One*. 2019; 14(5):e0216887.
30. Eholié SP, Aoussi FE, Ouattara IS, Bissagnéné E, Anglaret X. HIV treatment and care in resource-constrained environments: challenges for the next decade. *Journal of the International AIDS Society*. 2012; 15(2):17334.
31. Parker R, Aggleton P. HIV-and AIDS-related stigma and discrimination: A conceptual framework and implications for action. *In Culture, society and sexuality 2007*: 459-474. Routledge.
32. Djellouli N, Quevedo-Gómez MC. Challenges to successful implementation of HIV and AIDS-related health policies in Cartagena, Colombia. *Social Science & Medicine*. 2015; 133:36-44.

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	Website: www.ijcrcps.com
	Subject: Social Science & Medicine
Quick Response Code	
DOI: 10.22192/ijcrcps.2025.12.04.004	

How to cite this article:

Emmanuel Ifeanyi Obeagu and Olga Georgievna Goryacheva. (2025). E-Mentorship for HIV Awareness: Engaging Adolescent Women in the Digital Age. *Int. J. Curr. Res. Chem. Pharm. Sci.* 12(4): 26-33.
DOI: [http://dx.doi.org/10.22192/ijcrcps.2025.12.04.004](https://dx.doi.org/10.22192/ijcrcps.2025.12.04.004)