GENDER AS A CORRELATE OF HIV/AIDS PREVALENCE IN AFRICA

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Abstract

The HIV/AIDS epidemic in sub-Saharan Africa continues to pose a significant public health and socio-economic threat, with women and girls bearing a disproportionate burden of infection and impact. This paper explores the gendered nature of the epidemic by examining the socio-cultural, economic, and structural factors that increase female vulnerability to HIV. Adolescent girls and young women are especially at risk due to factors such as gender-based violence, early marriage, unequal power in relationships, limited access to education, and economic dependency. These issues are compounded by stigma and discrimination, which hinder access to testing, treatment, and support services. The study also analyzes epidemiological trends, highlighting current statistics and gender disparities in prevalence and treatment. Through a review of successful interventions such as the DREAMS initiative, SASA model, and Stepping Stones, the paper demonstrates how targeted, community-based programs can reduce new infections and empower women socially and economically. Despite advancements in treatment access and gender policy integration, major challenges remain. These include persistent patriarchal norms, inadequate enforcement of gender protections, underfunded programs, and lack of data-driven, intersectional responses. The paper offers policy recommendations focusing on gender mainstreaming, expanding access to comprehensive health services, investing in education and economic opportunities for women, and strengthening legal protections against gender-based violence. In conclusion, addressing HIV/AIDS in Africa through a gender-sensitive lens is critical not only for effective epidemic control but also for promoting gender equity and advancing sustainable development goals. A holistic, inclusive approach remains essential to ending the epidemic.

Keywords: HIV/AIDS, Gender, Policy Integration, Africa

Introduction

Human immunodeficiency virus (HIV) is a type of virus that attacks the human immune system, causing a decrease in CD4+ cell counts and immune function, which leads to AIDS and other life threatening opportunistic infections (Fisher et al., 2014). HIV/AIDS continue to pose significant public health challenges worldwide. Across different geographies, national boundaries, and even within individual provinces, the HIV epidemic has shown striking variation (De Cock et al., 2012). In 2023, approximately 39.9 million people worldwide were living with HIV. In the same year, 1.3 million individuals, became newly infected with the virus. Moreover, 630,000 people, lost their lives due to AIDS-related illnesses. Also, 30.7 million individuals were accessing antiretroviral therapy worldwide (UNAIDS, 2024).

The largest concentration of HIV-positive individuals in the world is found in Sub-Saharan Africa (GBD, 2015). Globally, women and girls of all ages accounted for 44% of all new HIV infections in 2023. In sub-Saharan Africa, this figure was even higher, with women and girls representing 62% of all new infections. Women in this region also constitute about 59% of the adult population living with HIV (WHO, 2011). Additionally, every week, approximately 4,000 adolescent girls and young women aged 15 to 24 became infected with HIV worldwide, with 3,100 of these infections occurring in sub-Saharan Africa (UNAIDS, 2023). Research from Sub-Saharan Africa indicates that sexual interactions between adolescent girls or young women and older men are a common way of HIV transmission. Furthermore, children born to HIV-positive mothers are at risk of contracting the virus if their mothers are not receiving effective treatment or are not being monitored (UNICEF, 2023).

The relationship between gender and HIV/AIDS in Africa has been the subject of considerable academic inquiry over the past two decades. Studies shows that gender inequalities play a significant role in both the transmission and management of HIV, with women and girls disproportionately affected by the epidemic (Magadi, 2013). This reality is especially evident in sub-Saharan Africa, where cultural norms, power dynamics, and socio-economic disadvantages converge to exacerbate female vulnerability to HIV. Adolescent girls and young women aged 15–24 are particularly at risk, facing infection rates more than double those of their male counterparts (UNESCO, 2013). This disparity cannot be explained by biology alone. Rather, it

reflects entrenched social and economic inequities that shape how different genders experience and respond to HIV risk. For instance, societal norms that condone male dominance in sexual relationships limit many women's ability to negotiate safe sex practices such as condom use (Mhungu *et al.*, 2022). Women who experience intimate partner violence are more likely to contract HIV, not only due to forced or unsafe sex but also because such violence can discourage them from accessing prevention, testing, or treatment services. There is a consistent link between exposure to violence and increased HIV risk among women. The fear of stigma and blame further compounds the issue, leading many women to delay or avoid seeking care altogether (Jewkes *et al.*, 2010).

Despite advancements in treatment access and gender policy integration, major challenges remain. These include persistent patriarchal norms, inadequate enforcement of gender protections, underfunded programs, and lack of data-driven, intersectional responses, hence this study which tends to explore the gendered nature of the epidemic by examining the socio-cultural, economic and structural factors that increase female vulnerability to HIV.

Significance of Gender Analysis in the Context of HIV/AIDS in Africa

Gender analysis is a critical tool in understanding the dynamics of the HIV/AIDS epidemic in Africa. It involves examining the differences in the roles, behaviors, opportunities, and needs of women and men, and how these differences influence vulnerability to HIV infection, access to healthcare services, and the overall impact of the disease. In the African context, where cultural, social, and economic factors are deeply intertwined with gender norms, such analysis is indispensable for developing effective and equitable HIV/AIDS interventions. Sub-Saharan Africa bears the highest burden of HIV/AIDS globally, with women and girls disproportionately affected (UNAIDS, 2023). Women constitute approximately 59% of adults living with HIV in the region, and young women aged 15–24 are more than twice as likely to be infected as their male counterparts. This disparity is not solely due to biological factors but is significantly influenced by gender-based, social and economic inequalities.

Impact of HIV/AIDS on Girls and Women in Africa

HIV/AIDS continues to have a profound and multifaceted impact on girls and women across Africa, affecting not only their health but also their social, economic, and psychological well-

being. Sub-Saharan Africa, in particular, remains the epicenter of the epidemic, with women and girls disproportionately burdened by the virus. This imbalance is not only due to biological susceptibility but is deeply rooted in socio-cultural and structural inequalities that shape how women experience the epidemic and its consequences. Young women, especially those aged 15 to 24, are more than twice as likely to contract HIV compared to their male peers (UNAIDS, 2023). This vulnerability stems from a combination of factors such as gender-based violence, early marriage, and limited access to sexual and reproductive health education. Girls and young women often lack the agency to negotiate safer sex, especially in relationships characterized by unequal power dynamics.

Additionally, socio-economic dependency and lack of access to education increase their risk of engaging in transactional sex or remaining in abusive relationships, both of which significantly heighten the risk of HIV transmission (Hajizadeh *et al.*, 2014). Once infected, women face unique challenges in accessing care. In many cases, stigma and discrimination related to both HIV status and gender roles discourage women from seeking treatment. Fear of rejection, violence, or loss of financial support often keeps women from disclosing their HIV status or adhering to treatment regimens (Jewkes *et al.,* 2010). In patriarchal societies, women may also lack control over decisions related to healthcare, including when and how to access antiretroviral therapy (Logie *et al.,* 2021).

The economic impact of HIV/AIDS on women is also severe. Women living with HIV are often the primary caregivers for sick relatives, which limits their ability to work or attend school. This caregiving burden, coupled with HIV-related health complications, undermines women's productivity and deepens cycles of poverty, particularly in rural and low-income communities (Magadi, 2013). For young girls, the loss of parents to AIDS frequently results in school dropout, child-headed households, and early marriages, all of which perpetuate vulnerability to HIV. Psychologically, the diagnosis of HIV can lead to anxiety, depression, and social isolation for women and girls. Cultural stigma often frames HIV as a moral failure, and women are frequently blamed for introducing the virus into the household, even when they are not the source of infection. This stigmatization adds to the emotional toll of living with a chronic illness and further limits women’s access to support systems (UNAIDS, 2023).

Despite these challenges, gender-responsive interventions have shown promising results. Programs that combine HIV prevention with education, economic empowerment, and gender-based violence prevention have improved outcomes for girls and women. Initiatives like the DREAMS partnership have demonstrated success in reducing new HIV infections among adolescent girls through multi-sectoral strategies that address both immediate health needs and underlying gender inequalities (Pettifor *et al.,* 2018).

Factors that contributed to the heightened vulnerability among women and girls in Africa

The socio-cultural landscape in sub-Saharan Africa plays a crucial role in shaping the experiences of women and girls in relation to HIV/AID. Various interrelated factors contribute to their heightened vulnerability, deeply rooted in traditional beliefs, norms and practices. These factors include the following;

Biological Factors

The biological determinants of HIV susceptibility among women and girls in sub-Saharan Africa constitute a complex interplay of physiological, immunological, and developmental factors that operate within broader socio-structural contexts. Biologically, women are more susceptible to HIV infection during heterosexual intercourse due to larger mucosal surface areas and higher viral concentrations in semen (Karim *et al.,* 2010). The vaginal vault provides approximately 130-150 cm^2 of mucosal surface area for potential viral exposure during intercourse, compared to the male urethra's 20 cm^2 (Hladik & McElrath, 2008). This expanded exposure zone increases the probability of viral entry, particularly when epithelial integrity is compromised.

Furthermore, the transformation zone of the cervix, where columnar epithelium meets squamous epithelium, is particularly susceptible to HIV infection due to its single-cell layer structure and high concentration of CD4+ T cells and dendritic cells (Pudney et al., 2005). This zone is proportionally larger in younger women, creating what researchers term the "biological double jeopardy" of adolescence (Abdool Karim et al., 2010). Also, In the contexts of forced or coercive sex, reported by 21% of women in East and Southern Africa (WHO, 2021) this trauma is significantly exacerbated, creating direct pathways for viral entry.

Gender-Based Violence

The syndemic relationship between gender-based violence (GBV) and HIV infection in sub-Saharan Africa represents one of the most pernicious manifestations of gendered health inequities. GBV operates as both causal pathway and structural determinant in HIV transmission dynamics, creating a "cycle of gendered risk" that systematically disadvantages women across biological, psychological and social dimensions (Heise, 2012). Women and girls often face physical, sexual, and emotional abuse which not only affects their mental health but also increases their risk of HIV infection. Survivors of GBV may be forced into sexual encounters without protection, exposing them to the virus. The trauma associated with such violence can also deter women from seeking testing and treatment, perpetuating the cycle of infection (WHO, 2011). High prevalence of GBV, including intimate partner violence and sexual assault, exacerbates women's risk of HIV infection. Studies indicate that women who experience GBV are more likely to engage in high-risk sexual behaviors and have limited access to HIV prevention and treatment services (PEPFAR, 2020).

Research consistently demonstrates the profound link between gender-based violence and heightened HIV risk among women in sub-Saharan Africa. A meta-analysis of 28 African cohorts revealed that women experiencing intimate partner violence (IPV) face 55% greater odds of HIV seroconversion compared to their non-abused counterparts (Jewkes et al., 2019). Regional studies further reinforce this association, with Tanzanian data showing that HIV prevalence among abused women (12.4%) nearly doubles the rate observed in non-abused women (6.7%) (Stockman et al., 2013). South African epidemiological research provides additional evidence, demonstrating that forced sexual debut elevates lifetime HIV risk by 48%, underscoring the enduring consequences of early sexual violence (Dunkle et al., 2020).

Early Marriage and Childbearing

Early marriage is prevalent in many communities, often resulting in young girls being married off before they reach adulthood. This practice places them in relationships with older partners who may have a higher likelihood of being HIV-positive. Young brides often lack the power to negotiate safe sex, making them more vulnerable to infection. Additionally, early childbearing can lead to health complications, further decreasing a young woman’s ability to access health

services (UNICEF, 2020).

Economic Factors

Economic hardship compels some women to engage in transactional sex or remain in relationships where they lack negotiating power for safe sex practices. This economic dependence increases their risk of HIV infection (Science Direct, 2020). Lower levels of education among women correlate with reduced awareness of HIV prevention methods and limited access to employment opportunities. This lack of empowerment perpetuates a cycle of vulnerability to HIV (BMC Public Health, 2016). Economic barriers, including the cost of healthcare services and transportation, limit women's access to HIV testing and treatment facilities. This inaccessibility contributes to delayed diagnoses and treatment initiation, adversely affecting health outcomes (AU, 2021).

Progress and Challenges in Addressing Gender Disparities in HIV/AIDS in Africa

Over the past two decades, considerable progress has been made in addressing gender disparities in the HIV/AIDS response across Africa. Various governments, non-governmental organizations, and international agencies have implemented gender-responsive interventions aimed at reducing the vulnerability of women and girls and ensuring equitable access to HIV prevention, treatment, and care. However, despite notable gains, persistent structural and cultural barriers continue to hinder progress.

One significant achievement is the expansion of Antiretroviral Therapy (ART), which has greatly improved the life expectancy and quality of life for women living with HIV. According to UNAIDS (2023), approximately 81% of HIV-positive women in sub-Saharan Africa are receiving ART, a higher percentage than their male counterparts. This disparity is partly due to the integration of HIV testing and treatment into maternal and child health services, particularly through prevention of mother-to-child transmission (PMTCT) programs. These initiatives have contributed to a decline in new infections among children and better health outcomes for mothers.

Another area of progress is the implementation of gender-transformative programs that tackle the root causes of gender inequality. Programs like DREAMS (Determined, Resilient, Empowered,

AIDS-free, Mentored, and Safe) have shown promising results in reducing HIV incidence among adolescent girls and young women by combining biomedical, behavioral, and structural interventions (Pettifor *et al*., 2018). These include access to sexual and reproductive health services, economic empowerment activities, and interventions to reduce gender-based violence.

Increased political and financial commitments have led to the development of gender-inclusive national strategic plans on HIV/AIDS. Many African countries have adopted frameworks that recognize the role of gender inequality in driving the epidemic and propose specific interventions to empower women and girls (AU, 2021). Regional bodies like the African Union have also issued advocacy briefs urging member states to mainstream gender in their HIV/AIDS responses.

Despite this progress, significant challenges remain. Patriarchal social norms and gender-based violence continue to undermine the effectiveness of HIV interventions. Women and girls often lack the autonomy to make decisions about their sexual and reproductive health. Gender-based violence remains widespread, with studies showing that women who experience intimate partner violence are significantly more likely to contract HIV (Jewkes *et al.,* 2010). Fear of violence or rejection also prevents many women from disclosing their HIV status or seeking treatment. Economic inequality is another persistent barrier. Poverty and unemployment force some women into risky sexual relationships or transactional sex, increasing their vulnerability to HIV. Although empowerment programs exist, they often do not reach the most marginalized women—especially those in rural areas, those with disabilities, or those affected by conflict and displacement (Logie *et al.,* 2021).

Additionally, stigma and discrimination continue to be major obstacles. Women living with HIV often face judgment and exclusion from their families and communities, particularly when they are seen as violating traditional gender roles. This stigma can be more intense for adolescent girls and young women, especially when pregnancy and HIV status intersect (UNAIDS, 2023). There are also gaps in funding and program sustainability. Many gender-focused HIV initiatives depend heavily on donor funding and may lack long-term support from national budgets. This fragility affects the scalability and sustainability of programs, particularly in resource-limited settings.

Limited male engagement remains a challenge. While efforts have rightly focused on empowering women, there is a growing recognition that engaging men and boys is essential to transform harmful gender norms and reduce HIV risk for all (Higgins *et al.,* 2010). While Africa has made measurable strides in addressing gender disparities in the context of HIV/AIDS, enduring social, economic, and institutional challenges continue to limit progress. Sustainable success will require a more intersectional and integrated approach—one that empowers women and girls, addresses structural barriers, and engages all members of society in creating a more gender-equitable response to HIV.

Case Studies of Gender-Focused Interventions in HIV/AIDS in Africa

Across sub-Saharan Africa, numerous gender-focused interventions have been developed to address the unique vulnerabilities and needs of women and girls in the context of HIV/AIDS. These interventions aim to reduce infection rates, improve access to treatment, empower women economically and socially, and challenge harmful gender norms that fuel the epidemic. Several notable case studies illustrate how integrated, community-driven approaches can produce measurable impacts in the fight against HIV while addressing gender inequality.

- **Nigeria**

Current trends in HIV/AIDS treatment in Nigeria indicate a shift towards achieving epidemic control, with a focus on expanding antiretroviral therapy (ART) coverage and viral suppression among people living with HIV (PLHIV). The country is also working towards the global "95-95-95" targets, aiming for 95% of PLHIV to know their status, 95% of those diagnosed to be on ART, and 95% of those on ART to achieve viral suppression. (Archibong and Goshen, 2023).

- **The DREAMS Partnership (Eastern and Southern Africa)**

One of the most comprehensive gender-focused HIV prevention efforts is the DREAMS (Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe) Partnership, launched in 2015. Operating in countries such as Kenya, South Africa, Uganda, and Zimbabwe, DREAMS targets adolescent girls and young women aged 15–24, a group disproportionately affected by HIV. The program combines biomedical, behavioral, and structural interventions, including pre-exposure prophylaxis (PrEP), HIV testing, gender-based violence prevention, school retention, parenting support, and economic empowerment activities (Pettifor *et al.,* 2018).

Evaluations of DREAMS have shown promising results. In Kenya and South Africa, for example, communities implementing DREAMS reported a 25–40% reduction in new HIV diagnoses among adolescent girls and young women within three years of program rollout (Saul *et al.,* 2018). This outcome demonstrates the effectiveness of layered, multi-sectoral interventions in curbing new infections while simultaneously promoting gender equity.

- **SASA Community Mobilization Model (Uganda)**

Developed by Raising Voices, the SASA model is a community mobilization initiative aimed at reducing HIV risk by challenging power imbalances between men and women. The acronym SASA stands for four phases: Start, Awareness, Support, and Action. The program trains community activists to facilitate discussions on gender, violence, and HIV in everyday spaces such as churches, clinics, and homes.

A randomized controlled trial in Kampala found that SASA significantly reduced the incidence of intimate partner violence (IPV) and improved women's ability to negotiate condom use (Abramsky *et al.,* 2014). Importantly, it also shifted community attitudes towards gender norms and helped men better understand the health impacts of violence and inequality. The study highlighted the value of long-term, locally driven interventions that engage entire communities in transforming harmful social norms.

- **Shuga Edutainment Campaign (Nigeria, Kenya, South Africa)**

MTV's 'Shuga' is a multi-platform edutainment campaign designed to promote HIV awareness and gender equality among youth. The show tackles issues such as transactional sex, sexual consent, stigma, and testing in an accessible and youth-friendly way. Its broad reach across Africa through television, radio, and social media platforms has made it a powerful tool in influencing knowledge and behavior.

Impact evaluations indicate that exposure to Shuga significantly increased HIV testing and condom use among viewers, particularly young women (Banerjee *et al.,* 2019). The program's ability to challenge gender stereotypes and promote respectful, consensual relationships makes it a strong example of how media can be harnessed to promote public health and social change.

- **Stepping Stones (South Africa)**

Stepping Stones is a life-skills and gender empowerment intervention developed in South Africa and adapted across multiple African countries. The program uses participatory methods such as storytelling, drama, and peer education to promote critical reflection on gender roles, communication, and HIV risk.

Research has shown that participants in Stepping Stones were more likely to reduce risky sexual behaviors, report fewer incidents of IPV, and show increased gender-equitable attitudes (Jewkes *et al.,* 2008). While the intervention's effect on HIV incidence was modest, it successfully contributed to improved relationship dynamics and reduced violence, both of which are key social determinants of HIV vulnerability.

Conclusion

The HIV/AIDS epidemic in Africa cannot be fully understood or effectively addressed without recognizing the profound impact of gender disparities. Women and girls, particularly adolescents and young women, continue to bear the greatest burden of the epidemic due to a confluence of biological, social, cultural, and economic factors. From unequal access to education and healthcare to gender-based violence and deeply entrenched patriarchal norms, the systemic inequalities faced by women fuel their heightened vulnerability to HIV and hinder their ability to access life-saving services. While significant strides have been made such as the expansion of antiretroviral therapy, gender-sensitive interventions like DREAMS and SASA, and increasing policy recognition of gender as a critical determinant many challenges persist. These include persistent stigma, inadequate funding for gender-focused programs, weak enforcement of protective legislation, and the underrepresentation of marginalized groups in national HIV strategies.

Recommendations

Despite decades of global and regional efforts, gender disparities continue to shape the trajectory of the HIV/AIDS epidemic in Africa. Women and girls, particularly adolescents and young women remain disproportionately affected due to deeply embedded socio-cultural, economic, and structural inequalities. To effectively curb the epidemic, future policy and programmatic

efforts must adopt a gender-transformative approach that not only responds to women's needs but also actively challenges the systems that perpetuate their vulnerability. In other to address the Challenges of Gender Disparities in HIV/AIDS in Africa this paper outline the following recommendation;

- Governments and international bodies must institutionalize gender-responsive policies across all levels of HIV programming. This means integrating gender analysis into national HIV strategies, health budgets, and monitoring systems to ensure women's and girls' needs are prioritized (UNAIDS, 2023). Policies should be informed by disaggregated data to accurately track disparities and outcomes across gender and age groups.

- Given the strong link between GBV and HIV infection, policies must address violence as both a cause and consequence of the epidemic. Governments should strengthen legal protections against domestic and sexual violence, improve law enforcement accountability, and ensure survivors have access to medical, psychosocial, and legal support (Jewkes *et al.,* 2010). National HIV/AIDS plans should include GBV prevention components and partnerships with organizations specializing in women's rights.

- Policymakers must expand access to sexual and reproductive health services, including contraception, HIV testing, treatment, and pre-exposure prophylaxis (PrEP), especially for adolescent girls and marginalized women. These services should be youth-friendly, confidential, and free from stigma or discrimination (WHO, 2022). Integration of HIV services into maternal and child health platforms can also improve accessibility and uptake.

- Education is a powerful protective factor against HIV. Governments should prioritize policies that keep girls in school through scholarships, menstrual health programs, and protection from early marriage and pregnancy. Simultaneously, women's economic empowerment through vocational training, access to credit, and land rights can reduce dependency on risky relationships and increase autonomy in health decision-making (Hajizadeh *et al.,* 2014).

- Addressing gender disparities also requires engaging men and boys in HIV prevention, care, and the promotion of gender equality. Policies should support community-based initiatives that encourage positive masculinities, challenge harmful norms, and foster equitable relationships (Higgins *et al.,* 2010). Programs like SASA have demonstrated success in involving men as

allies in the fight against HIV and GBV.

References

Abdool Karim, Q., Sibeko, S., & Baxter, C. (2010). Preventing HIV infection in women: *A global health imperative*. Clinical Infectious Diseases, 50 (Suppl 3), S122-S129. https://doi.org/10.1086/651483

Abrahams, N., Jewkes, R., & Mathews, S. (2010). Depressive symptoms after a sexual assault among women: Understanding victim-perpetrator relationships and the role of social perceptions. *American Journal of Orthopsychiatry, 80*(3), 390-400. https://doi.org/10.1111/j.1939-0025.2010.01042.x

Abramsky, T., Devries, K. M., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., & Watts, C. (2014). Findings from the SASA! Study: a cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala, Uganda. *BMC Medicine, 12*(1), 122.

Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., & Watts, C. (2016). The impact of SASA! A community mobilization intervention, on reported HIV-related risk behaviours and relationship dynamics in Kampala, Uganda. *Journal of the International AIDS Society, 19*(1), 21332. https://doi.org/10.7448/IAS.19.1.21332

African Union (AU). (2021). *Gender Equality, Women's Empowerment (GEWE) and HIV in Africa*.

African Union. (2022). *AU Advocacy Brief on Gender Equality, Women's Empowerment (GEWE) and HIV in Africa: The impact of intersecting issues and key continental priorities*.

Amin, A. (2015). Addressing gender inequalities to improve the sexual and reproductive health and wellbeing of women living with HIV. *Journal of the International AIDS Society*, 18(6), 20302.

Atashili, J., Poole, C., Ndumbe, P. M., Adimora, A. A., & Smith, J. S. (2008). Bacterial vaginosis and HIV acquisition: *A meta-analysis of published studies. AIDS*, 22(12), 1493-1501. https://doi.org/10.1097/QAD.0b013e3283021a37

Auvert, B., Taljaard, D., Lagarde, E., Sobngwi-Tambekou, J., Sitta, R., & Puren, A. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: The ANRS 1265 trial. *PLoS Medicine, 2*(11), e298. https://doi.org/10.1371/journal.pmed.0020298

Banerjee, A., La Ferrara, E., & Orozco-Olvera, V. H. (2019). The entertaining way to behavioral change: Fighting HIV with MTV. *NBER Working Paper No. 26096*.

Baeten, J. M., Donnell, D., Ndase, P., Mugo, N. R., Campbell, J. D., Wangisi, J., Tappero, J. W., Bukusi, E. A., Cohen, C. R., Katabira, E., Ronald, A., Tumwesigye, E., Were, E., Fife, K. H., Kiarie, J., Farquhar, C., John-Stewart, G., Kakia, A., Odoyo, J., ... Celum, C. (2011). Antiretroviral prophylaxis for HIV prevention in heterosexual men and women. *New England Journal of Medicine, 367*(5), 399-410.

Boily, M.-C., Baggaley, R. F., Wang, L., Masse, B., White, R. G., Hayes, R. J., & Alary, M. (2009). Heterosexual risk of HIV-1 infection per sexual act: Systematic review and meta-analysis of observational studies. *The Lancet Infectious Diseases, 9*(2), 118-129. https://doi.org/10.1016/S1473-3099(09)70021-0

BMC Public Health. (2010). Gender-related power differences, beliefs and reactions towards people living with HIV/AIDS: an urban study in Nigeria.

BMC Public Health. (2016). What explains gender inequalities in HIV/AIDS prevalence in sub-

BMC Public Health. (2021). *Exploring the feasibility and acceptability of integrating screening for gender-based violence into HIV counselling and testing for adolescent girls and young women in Tanzania and South Africa*.

Critchlow, C. W., Wölner-Hanssen, P., Eschenbach, D. A., Kiviat, N. B., Koutsky, L. A., Stevens, C. E., & Holmes, K. K. (1995). Determinants of cervical ectopia and of cervicitis: Age, oral contraception, specific cervical infection, smoking, and douching. *American Journal of Obstetrics and Gynecology, 173*(2), 534-543. https://doi.org/10.1016/0002-9378(95)90279-1

Colombini, M., Dockerty, C., & Mayhew, S. H. (2016). Barriers to integrating health services for intimate partner violence and HIV in public sector settings: Perspectives from South Africa. *Global Public Health, 11*(7-8), 953-968. https://doi.org/10.1080/17441692.2016.1168866

Deering, K. N., Amin, A., Shoveller, J., Nesbitt, A., Garcia-Moreno, C., Duff, P., & Shannon, K. (2014). A systematic review of the correlates of violence against sex workers. *American Journal of Public Health, 104*(5), e42-e54. https://doi.org/10.2105/AJPH.2014.301909

Dunkle, K. L., Decker, M. R., Holliday, C. N., McCauley, H. L., Harlow, S. D., Silverman, J. G., & Saggurti, N. (2020). Reproductive coercion and partner violence: Implications for clinical assessment of unintended pregnancy. *Expert Review of Anti-infective Therapy, 18*(1), 25-32. https://doi.org/10.1080/14787210.2020.1705156

Farage, M. A., & Maibach, H. I. (2006). Lifetime changes in the vulva and vagina. *Archives of Gynecology and Obstetrics, 273*(4), 195-202. https://doi.org/10.1007/s00404-005-0079-x

Gender and AIDS. (2022.). *The Issue*. Retrieved from

https://genderandaids.unwomen.org/en/wpir/the-issue(Gender Equality And HIV/AIDS)

Hajizadeh, M., Nandi, A., & Heymann, J. (2014). Social inequality and HIV/AIDS prevalence in sub-Saharan Africa. *Journal of International AIDS Society*, 17(1), 19066.

Hatcher, A. M., Smout, E. M., Turan, J. M., Christofides, N., & Stöckl, H. (2015). Intimate partner violence and engagement in HIV care and treatment among women: A systematic review and meta-analysis. *AIDS, 29*(16), 2183-2194. https://doi.org/10.1097/QAD.0000000000000842

Heise, L. L. (2012). Determinants of partner violence in low and middle-income countries: Exploring variation in individual and population-level risk (Doctoral dissertation, London School of Hygiene & Tropical Medicine). https://doi.org/10.17037/PUBS.00682334

Health and Human Rights Journal. (2013). *How do national strategic plans for HIV and AIDS in southern and eastern Africa address gender-based violence? A women's rights perspective*.

Hickey, R. J., Zhou, X., Pierson, J. D., Ravel, J., & Forney, L. J. (2012). Understanding vaginal microbiome complexity from an ecological perspective. *Translational Research, 160*(4), 267-282. https://doi.org/10.1016/j.trsl.2012.02.008

Hladik, F., & McElrath, M. J. (2008). Setting the stage: Host invasion by HIV. *Nature Reviews Immunology, 8*(6), 447-457. https://doi.org/10.1038/nri2302

Higgins, J. A., Hoffman, S., & Dworkin, S. L. (2010). Rethinking gender, heterosexual men, and women's vulnerability to HIV/AIDS. *American Journal of Public Health*, 100(3), 435–445.

Jewkes, R., Dunkle, K., Nduna, M., & Shai, N. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: A cohort study. *The Lancet*, 376(9734), 41–48.

Jewkes, R., Dunkle, K., Nduna, M., Jama, P. N., & Puren, A. (2013). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect, 37*(1), 33-41. https://doi.org/10.1016/j.chiabu.2012.10.001

Jewkes, R., Fulu, E., Tabassam Naved, R., Chirwa, E., Dunkle, K., Haardörfer, R., & Garcia-Moreno, C. (2019). Women's and men's reports of past-year prevalence of intimate partner violence and rape and women's risk factors for intimate partner violence: A multicountry cross-sectional study in Asia and the Pacific. *PLoS Medicine, 16*(9), e1002921. https://doi.org/10.1371/journal.pmed.1002921

Kilonzo, N., Taegtmeyer, M., Molyneux, S., & Theobald, S. (2019). Gendered health systems: Evidence from low-and middle-income countries. *Health Research Policy and Systems, 17*(1), 1-12. https://doi.org/10.1186/s12961-019-0431-4

Leclerc-Madlala, S. (2018). Transactional sex and the pursuit of modernity. *Social Dynamics, 44*(1), 1-16. https://doi.org/10.1080/02533952.2018.1434422

Logie, C. H., Okumu, M., Mwima, S., Kyambadde, P., Loutfy, M., & Hakiza, R. (2021). Gender, race, and intersectionality in HIV research: Navigating the complexities. *Journal of the International AIDS Society*, 24(S1), e25652.

Magadi, M. A. (2013). Understanding the gender disparity in HIV infection across countries in sub-Saharan Africa: Evidence from the Demographic and Health Surveys. *Sociology of Health & Illness*, 35(4), 608–621.

Mestecky, J., Moldoveanu, Z., & Russell, M. W. (2005). Immunologic uniqueness of the genital tract: Challenge for vaccine development. *American Journal of Reproductive Immunology, 53*(5), 208-214. https://doi.org/10.1111/j.1600-0897.2005.00267.x

Morrison, C. S., Chen, P.-L., Kwok, C., Baeten, J. M., Brown, J., Crook, A. M., Van Damme, L., Delany-Moretlwe, S., Francis, S. C., Friedland, B. A., Hayes, R. J., Heffron, R., Kapiga, S., Karim, Q. A., Karpoff, S., Kaul, R., McClelland, R. S., McCormack, S., McGrath, N., ... van der Straten, A. (2020). Hormonal contraception and the risk of HIV acquisition: An individual participant data meta-analysis. *PLoS Medicine, 17*(12), e1003148. https://doi.org/10.1371/journal.pmed.1003148

Mhungu, A., Sixsmith, J., & Burnett, E. (2022). Adolescent girls and young women's experiences of living with HIV in the context of patriarchal culture in sub-Saharan Africa: A scoping review. *AIDS and Behavior*, 27, 1365–1379.

NCBI Bookshelf. (2022.). Integrating Gender into HIV/AIDS Programmes in the Health Sector.

Pettifor, A., Stoner, M., Pike, C., & Bekker, L. G. (2018). Adolescent lives matter: Preventing HIV in adolescents. *Current Opinion in HIV and AIDS*, 13(3), 265–273.

PMC. (2012). Understanding the gender disparity in HIV infection across countries in sub-Saharan Africa: evidence from the Demographic and Health Surveys.

PMC. (2018). Gender disparity in epidemiological trend of HIV/AIDS infection and treatment in Ethiopia.

Population Reference Bureau. (2023). *Gender-Based Violence Increases Risk of HIV/AIDS for Women in Sub-Saharan Africa*.

Pudney, J., Quayle, A. J., & Anderson, D. J. (2005). Immunological microenvironments in the human vagina and cervix: Mediators of cellular immunity are concentrated in the cervical transformation zone. *Biology of Reproduction, 73*(6), 1253-

1263. https://doi.org/10.1095/biolreprod.105.043133

Reuters. (2025). Gilead commits to HIV prevention rollout for low-income countries despite funding uncertainty.

Saul, J., Bachman, G., Allen, S., Toiv, N. F., Cooney, C., & Beamon, T. (2018). The DREAMS core package of interventions: A comprehensive approach to preventing HIV among adolescent girls and young women. *PLOS ONE, 13*(12), e0208167.

Science Direct. (2020). *The effect of gender inequality on HIV incidence in Sub-Saharan Africa*.

Sikkema, K. J., Mulawa, M. I., Robertson, C., Watt, M. H., Ciya, N., Stein, D. J., & Joska, J. A. (2013). Improving AIDS Care after Trauma (ImpACT): Pilot outcomes of a coping intervention among HIV-infected women with sexual trauma in South Africa. *AIDS and Behavior, 17*(9), 2945-2955. https://doi.org/10.1007/s10461-013-0549-2

Stockman, J. K., Lucea, M. B., & Campbell, J. C. (2013). Forced sexual initiation, sexual intimate partner violence and HIV risk in women: A global review of the literature. *AIDS and Behavior, 17*(3), 832-847. https://doi.org/10.1007/s10461-012-0361-4

The Microbiologist. (2021). Gender-specific approaches to HIV prevention: addressing the needs of women and girls.

Time. (2019). *'No Help Is Coming.' How Devastating Floods Are Fueling Sexual Violence and the Spread of HIV in Malawi*.

Uganda Bureau of Statistics (UBOS). (2020). Uganda demographic and health survey 2016. UBOS. https://www.ubos.org

UNAIDS. (2021). Gender equality and justice critical for ending AIDS.

UNAIDS. (2022). Global AIDS strategy 2021-2026: End inequalities, end AIDS. UNAIDS. https://www.unaids.org

UNAIDS. (2023). *Global AIDS Update: The path that ends AIDS*. https://www.unaids.org/en/resources/documents/2023/global-aids-update

UNAIDS. (2023). Global HIV & AIDS statistics — Fact sheet.

UNESCO. (2023). The Gender Dimensions of HIV/AIDS: Putting Gender on the MAP

UN Women. (2018). The Feminisation of HIV and AIDS.

UN Women. (2023). Gender and HIV/AIDS – the Human Rights and Security Perspectives.

Vox. (2023). *Africa is beating HIV. But the rest of the world is falling behind*.

Wira, C. R., Rodriguez-Garcia, M., & Patel, M. V. (2015). The role of sex hormones in immune protection of the female reproductive tract. *Nature Reviews Immunology, 15*(4), 217-230. https://doi.org/10.1038/nri3819

World Bank. (2004). Integration of Gender Issues in Selected HIV/AIDS Projects in the Africa Region.

World Health Organization (WHO). (2022). *HIV/AIDS Fact Sheet*. https://www.who.int/news-room/fact-sheets/detail/hiv-aids

World Health Organization. (2003). *Gender and HIV/AIDS*.

World Health Organization. (2021). Violence against women prevalence estimates, 2018: Global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women. https://www.who.int/publications/i/item/9789240022256

World Health Organization. (2023). HIV/AIDS. https://www.who.int/news-room/fact-sheets/detail/hiv-aids