

## **Epidemiology & Health Data Insights**

(eISSN 3080-8111)



Review Article

## Association Between Gender-Based violence and HIV Risk in Sub-Saharan African

## Women: A Scoping Review

Vivian Ukamaka Nwokedi¹, Doreen Mensah², Wonderful Oluwatoyin Anosike³, Chidinma Lorretta Gab-Obinna⁴, Augustine B Nyumah⁵, Ayodeji John Awoyemi⁶

- <sup>1</sup>Department of Clinical Pharmacy, Faculty of Pharmacy, University of Benin, Benin City, Nigeria
- <sup>2</sup>Department of Computing and Information Technology, College of Southern Nevada, Las Vegas, Nevada, USA
- <sup>3</sup>Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust, Newcastle-Upon-Tyne, UK
- <sup>4</sup>Biomedical Laboratory Science Department, Kingston University London, UK
- <sup>5</sup>Department of General Medicine, Ternopil National Medical University, Ternopil, Ukraine
- <sup>6</sup>Department of Obstetrics and Gynecology, Federal Medical Center, Epe, Lagos, Nigeria



#### **Abstract:**

**Background:** Gender-based violence (GBV) and Human Immunodeficiency Virus (HIV) are critical public health issues in Sub-Saharan Africa, disproportionately affecting women. Gender-based violence (GBV)—including intimate partner violence and sexual assault—fuels HIV transmission via trauma, coercion, and healthcare barriers. This syndemic demands urgent, evidence-based solutions to break the cycle of risk.

**Objectives:** This study aims to explore the prevalence, types, and socio-cultural, economic, and power-related factors linking GBV to HIV risk among women in Sub-Saharan Africa, and to assess the effectiveness of integrated interventions addressing both issues.

**Methodology:** In carrying out this review, a scoping review design was employed. Pub-Med, African Journals Online (AJOL), and Google Scholar were searched for peer-reviewed studies conducted across Sub-Saharan Africa focusing on association of GBV and HIV risks. Data was extracted on the prevalence of HIV cases linked to GBV, and interventions addressing such prevalence. A thematic synthesis was used to identify common trends and gaps in the literature.

**Findings:** This study found GBV prevalence rates ranging from 3.4–89.3% across included studies, with significant geographic and population-based variations. GBV was identified as a major risk factor for HIV, particularly in settings with high economic dependence and gender inequality. Integrated interventions combining HIV care and GBV services were found to improve health outcomes, though access remains limited in rural areas.

**Conclusion:** This study underscores the urgent need for integrated, multi-sectoral approaches to address both GBV and HIV. Future research should focus on longitudinal studies and the scalability of successful interventions in diverse settings. Policymakers must prioritize these intersections to reduce the burden on women's health in Sub-Saharan Africa.

**Keywords:** Gender-Based Violence; HIV; Intimate Partner Violence; Sub-Saharan Africa; Public Health; Women's Health

#### Introduction

Gender-based violence (GBV) remains a significant issue in Sub-Saharan Africa, where it takes various forms, including physical, sexual, and emotional abuse [1]. These acts of violence are not only widespread but also deeply entrenched in cultural and societal norms, making them difficult to address [2, 3]. The World Health Organization (WHO) estimates that one in three (30%) women worldwide will experience physical or sexual violence during their lifetime [4], and Sub-Saharan Africa bears a disproportionate share of this burden [5]. The prevalence of intimate partner violence (IPV), sexual violence, and harmful traditional practices, such as female genital mutilation, exacerbates the vulnerability of women in the region [1, 6].

GBV is not merely a violation of human rights but also a major public health concern, undermining women's health and well-being and placing immense pressure on healthcare systems [7]. The impact of GBV on women's health is multifaceted and severe, affecting both their physical and psychological well-being. Physical injuries resulting from violence, including fractures, lacerations, and sexually transmitted infections (STIs), are common and can have long-term health consequences, including infertility and chronic pain [8]. In addition to these physical harms, the psychological toll of GBV is profound, with survivors often experiencing depression, anxiety, post-traumatic stress disorder (PTSD), and suicidal tendencies [9].

HIV remains one of the most significant public health challenges in Sub-Saharan Africa, with women bearing a disproportionate burden of the epidemic. According to UNAIDS (2020) [10], Sub-Saharan Africa is home to nearly two-thirds of the global population living with HIV, and women account for more than half of this total. Among women in the region, young women and girls are particularly vulnerable, with their HIV prevalence rates far exceeding those of their male counterparts [10]. This heightened vulnerability can be attributed to several factors, including biological differences that make women more susceptible to HIV during unprotected sex [11].

Additionally, limited control over sexual decision-making, gender-based power imbalances, and unsafe sexual practices such as intergenerational sex or transactional sex increase women's exposure to HIV [12]. The experience of GBV further compounds these risks by forcing women into sexual encounters that expose them to HIV, either through unprotected sex or

through physical trauma that facilitates the transmission of the virus [13, 14]. Violence, thus, acts as a critical risk factor for HIV acquisition, both directly through physical harm and indirectly through the disruption of women's ability to protect themselves.

On the other hand, the socio-cultural and economic context of Sub-Saharan Africa plays a critical role in shaping the relationship between GBV and HIV risk. Cultural norms that define gender roles often place women in subordinate positions, making them more likely to experience GBV and less able to negotiate safe sexual practices [2, 15]. In many communities, women are expected to fulfill traditional roles as caregivers and homemakers, while men control economic resources and decisions related to sexual relations. This unequal power dynamic not only perpetuates violence but also limits women's ability to access HIV prevention tools, such as condoms, or seek HIV treatment and care [16, 17].

Furthermore, the economic dependence of women on male partners often leaves them with little choice but to tolerate violence or engage in risky sexual behaviors in exchange for financial support [18]. Poverty, combined with limited access to education and healthcare, reinforces the cycles of violence and HIV vulnerability. Women in impoverished communities are particularly at risk, as they may lack the resources to escape abusive situations or seek medical care when needed [19].

Despite the growing body of literature on GBV and HIV risk, there remains a limited comprehensive synthesis of the existing evidence, particularly regarding the unique intersection of these two issues in Sub-Saharan African women. While several studies have explored GBV and HIV risk in isolation, few have explicitly examined how these factors co-occur and reinforce one another. This scoping review aims to fill this gap by synthesizing the available evidence on the prevalence, and interventions of GBV in relation to HIV risk among women in Sub-Saharan Africa, thereby contributing to a deeper understanding of how GBV exacerbates the HIV epidemic among women in the region and inform future interventions. The findings from this review will provide valuable insights for policymakers, researchers, and practitioners seeking to design more effective and integrated approaches to preventing GBV and HIV in Sub-Saharan Africa.

## Methodology

## **Study Design**

This study utilized a scoping review design following Arksey and O'Malley (2005) guidelines [20], as it is particularly effective for mapping broad research questions.

#### **Research Question**

The central research question that guided this scoping review was: What is the prevalence of gender-based violence (GBV) and HIV risk among women in Sub-Saharan Africa, and what are the key interventions for addressing the co-occurrence of these two issues? In formulating this question, the PCC framework was adopted [21]. The key elements were: the population (women in Sub-Saharan Africa), the concept of interest (GBV and HIV risk), and the contextual factors (social, cultural, economic, and political influences).

## **Information Sources and Search Strategy**

A systematic search was conducted across several relevant databases to ensure a comprehensive review of

the literature. The databases chosen for this review were PubMed, African Journals Online (AJOL), and Google Scholar. These databases were selected due to their broad coverage of both public health and social sciences literature, as well as their focus on research relevant to Sub-Saharan Africa. The search strategy involved using a combination of key terms and Boolean operators "AND" and "OR" [22], as well as MeSH terms (depending on the database) [23]. Appropriate database filters were applied to limit search results included: publication date from 2010 to to the search date (September 8, 2025), articles written in English, and peer-reviewed research only. Additionally, the search was restricted to studies involving human subjects, focusing on women in Sub-Saharan Africa, and addressing both gender-based violence (GBV) and HIV risk. The full search strategy is detailed in Table 1.

**Table 1: Search Strategy** 

Database	Compiled search terms	Search yield
PubMed	(Gender-Based Violence[Mesh] OR Intimate Partner Violence[Mesh] OR Sexual Violence[Mesh] OR GBV[tiab] OR IPV[tiab] OR domestic abuse[tiab]) AND (Prevalence[Mesh] OR prevalence[tiab] OR association[tiab] OR risk[tiab] OR intervention[tiab]) AND (HIV Infections[Mesh] OR HIV[Mesh] OR HIV risk[tiab] OR HIV transmission[tiab] OR HIV prevalence[tiab]) AND (Women[Mesh] OR Female[Mesh] OR women[tiab] OR female[tiab]) AND (Sub-Saharan Africa[Mesh] OR Sub-Saharan Africa[tiab])	534
Google Scholar	(Gender-Based Violence OR Intimate Partner Violence OR Sexual Violence OR GBV OR IPV OR domestic abuse) AND (Prevalence OR association OR risk OR intervention) AND (HIV Infections OR HIV OR HIV risk OR HIV transmission OR HIV prevalence) AND (Women OR Female) AND (Sub-Saharan Africa)	19900
AJOL	(Gender-Based Violence OR Intimate Partner Violence OR Sexual Violence OR GBV OR IPV OR domestic abuse) AND (Prevalence OR association OR risk OR intervention) AND (HIV Infections OR HIV OR HIV risk OR HIV transmission OR HIV prevalence) AND (Women OR Female) AND (Sub-Saharan Africa)	831

## **Eligibility Criteria**

To capture the most relevant studies, clear inclusion and exclusion criteria were established. Publications included in this review were peer-reviewed original research articles, published in English between 2010 and the search date (September 8, 2025), focusing on women living in Sub-Saharan Africa and addressing

both GBV and HIV risk. The studies had to focus on the relationship between GBV and HIV, exploring either the prevalence of HIV cases linked to GBV, the mechanisms linking them, or interventions aimed at reducing the risk.

Studies were excluded if they were focused on populations outside Sub-Saharan Africa, did not address both GBV and HIV risk, did not include women. Also, studies that were not peer-reviewed or lacked relevant data were excluded.

## **Study Selection**

After conducting the search and applying appropriate filters, duplicates were removed in Zotero and the titles and abstracts of the retrieved studies were screened. Studies that met the inclusion criteria were retrieved in full for a detailed review. Two independent reviewers performed the screening to ensure consistency and minimization of bias. Disagreements between reviewers were resolved through consensus.

Studies that met the eligibility criteria were included for data extraction.

The initial search identified a total of 21,265 records across three databases: 534 in PubMed, 19,900 in Google Scholar, and 831 in AJOL. After removing 20,262 records based on duplicate entries and application of appropriate filters, 1,003 records were screened during title and abstract screening. Following further assessment for eligibility, 22 reports were reviewed, ultimately leading to the inclusion of 8 studies in this scoping review [24-31]. The exclusion of studies at this stage were primarily due to irrelevance to the research question, focusing on prevalence, and the nature of interventions. The PRISMA flow diagram detailing on the selection process for this study is shown in Figure 1.

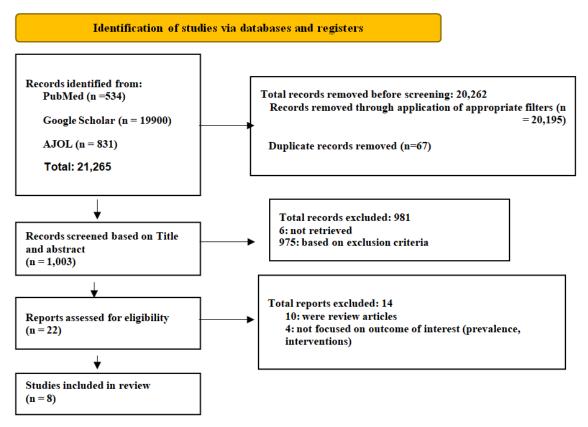


Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Flow Diagram

## **Data Extraction**

After retrieving the relevant studies, the data extraction was conducted independently by two researchers and discrepancies were resolved through discussion. Key data extracted from the studies included information relating to study characteristics (author(s), year of publication, study design, and country of study), population characteristics (age range of participants,), types of violence addressed in the study (such as intimate partner violence, sexual violence, emotional abuse), HIV-related outcomes (prevalence of HIV

among women exposed to GBV, risk factors for such HIV transmission, and any associated interventions).

#### **Data Synthesis**

A thematic analysis was conducted to identify common themes related to the link between GBV and HIV risk, and the socio-cultural, economic, and political factors that influenced both issues.

The data were synthesized narratively, with a focus on summarizing the key findings across the included studies. The synthesis allowed for the identification of patterns and trends in the literature.

## **Results**

### **Study Characteristics**

The studies included in this review varied in design, country setting, and participant characteristics as shown in Table 2, reflecting the complex intersection of gender-based violence (GBV) and HIV risk across Sub-Saharan Africa. Of the 8 studies, 5 utilized cross-sectional designs, while others employed cluster randomized trials or mixed methods, highlighting diverse research approaches. Participant numbers ranged from as few as 30 women to over 198,806 across 22 Sub-Saharan

African countries [26, 28]. The prevalence of GBV exposure varied significantly, with a highest (89.3%) recorded by Mashaphu et al. (2018) study in South African [28]. A common theme across studies was the association between intimate partner violence (IPV) and increased HIV risk, with interventions such as health service integration and HIV care access programs often employed. Studies also explored a broad age range, from 15 to 50 years, indicating the widespread impact of GBV across different life stages.

**Table 2: Characteristics of Included Studies** 

Study ID	Study Desig n	Cou ntry	Total numbe r of Partici pants	Number of Particip antsExp osed to GBV	Prevalen ce of HIV cases linked to GBV	Age of Participan ts	Types of Violenc e	Intervention s to	Source
Decker et al. (2016) [24]	Cross- section al Study	Cam eroo n	1817	60.4% (1098 out of 1817 women who reported GBV)	6.1% (67 out of 1098 women who reported GBV)	Age range=15- 49 years	Sexual, physical GBV	Integration of health services	Sexually Transmi tted Infectio ns Journal
Settergre n et al. (2018) [25]	Cluste r RCT	Tanz ania	1248	52% (649 out of 1,248 women who experien ced IPV)	Not reported	Age range=15- 49 years	Physical, Sexual intimate partner violence (IPV)	SHARE intervention	PLOS ONE
Tsai & Subrama nian (2012) [26]	Cross- section al Study	22 Sub- Saha ran Afri ca	198,806	Not reported	Not reported	Age range = 15-49 years	Physical, sexual intimate partner violence (IPV)	HIV prevention, condom negotiation intervention s	AIDS Journal

Shamu et al. (2019) [27]	Cross-section al Study	Zim bab we	2,042	Not reported	Not reported	Mean age = 26 years	Sexual, physical childhoo d abuse	Child abuse prevention programs	PLOS ONE
Mashap hu et al. (2018) [28]	Cross- section al study	Sout h Afri ca	30	89.3% (16 out of 18 HIV positive women reported GBV)	60% (18 out of 30 women)	Age range = 25-45 years	Physical, Sexual, Emotion al IPV	Not reported	South African Medical Journal
Ogbonn aya et al. (2022) [29]	Cluste r RCT	Uga nda	150	46% (69 out of 150 women living with HIV)	Not reported	Mean age =28.3 years	Intimate partner violence (IPV), Emotion al, Physical, Sexual Abuse	HIV care access programs targeting IPV	Journal of Interper sonal Violence
Roberts et al. (2018) [30]	Mixed metho d combi ning both cross-section al and prospe ctive	Ken ya	283	87% (246 out of 283 women who reported GBV)	Not reported	Age range= 18- 50 years	Physical, Sexual, Emotion al and intimate partner violence (IPV)	Not reported	AIDS Behavio r
Richter et al. (2014) [31]	Cross- section al	Sout h Afri ca, Zim bab we, and	6262	3.4% (213 out of 6262 women who reported GBV)	Not reported	Age range=18- 32 years	Childho od sexual abuse	Community mobilization	AIDS Behavio r

Tanz				
ania				

## Narrative Synthesis

# Prevalence of HIV cases linked to GBV Among Women in Sub-Saharan Africa

GBV prevalence varies widely across studies and most reported GBV reported in the studies included in this review is intimate partner violence (IPV). Among the studies reviewed, Mashaphu et al. (2018) [28] reported the highest GBV prevalence rates, with 89.3% of women in HIV-serodiscordant couples in South Africa experiencing IPV. This is in stark contrast to the lowest GBV prevalence (3.4%) reported by Richter et al. (2014) [31] for childhood sexual abuse among women in South Africa as well, thereby showing disparities even within a single geographical region. It is worthy of note that the 3.4% represents prevalence of women out of the general population. Tsai & Subramanian (2012) [26] also reported notable differences in GBV prevalence between urban and rural populations, with rural women, particularly those experiencing economic hardship, at higher risk for both GBV and HIV. However, the intersection between GBV and HIV risk is also emphasized across studies [24, 27, 28], with forced or coerced sex, greatly increasing women's susceptibility to HIV.

# Socio-Cultural, Economic, and Power-Related Risk Factors for GBV and HIV Intersection

The intersection between GBV and HIV risk is deeply influenced by socio-cultural, economic, and power dynamics. In many Sub-Saharan African societies, gender norms often place women in subordinate roles, fostering environments where IPV is normalized and women's ability to negotiate safe sex is restricted. The power imbalance within relationships is compounded by women's economic dependency on male partners, limiting their ability to escape abusive situations or negotiate safer sexual practices.

Women often remain in abusive relationships because of their financial reliance on male partners. Addressing such issues of gender inequality, Roberts et al. (2018) [30] emphasized that women's economic independence and empowerment are crucial in reducing both IPV and HIV vulnerability. Further complicating these dynamics is the social norm of transactional sex, where women engage in sexual exchanges for financial gain. Moreover, women in this situation are particularly vulnerable to IPV, as their sexual autonomy is severely restricted by economic pressures [30].

Similarly, Shamu et al. (2019) [27] discussed how poverty and limited access to resources exacerbate the cycle of GBV and HIV, making it difficult for women to seek care or leave abusive relationships. Furthermore, according to Decker et al. (2016) [24] and Settergren et al. (2018) [25] GBV is not only driven by gender norms but is also exacerbated by relationship power dynamics, which are prevalent in rural and impoverished communities.

# Interventions and Service Integration Targeting GBV and HIV

Integrated interventions that address both intimate partner violence (IPV) and HIV risk are crucial for improving health outcomes for women in Sub-Saharan Africa. Several studies have demonstrated that combining gender-based violence (GBV) services with HIV care not only enhances women's engagement in both areas but also improves health outcomes. One such intervention, the Safe Homes and Respect for Everyone (SHARE) program in Tanzania, successfully integrated IPV prevention with HIV care. This intervention led to a notable reduction in IPV rates and improved adherence to HIV treatment. Specifically, Settergren et al. (2018) [25] found that participants in the SHARE program showed reductions in IPV in both intervention and control arms, with a 29% overall reduction. The program improved GBV service utilization at health facilities and increased HIV service provision to GBV survivors. The study highlights the potential of integrated models addressing GBV and HIV.

Similarly, Shamu et al. (2019) [27] highlighted the benefits of integrated services in Zimbabwe, where a program combining IPV screening with HIV care improved women's access to both services. Women who participated in the integrated services showed improved retention in HIV care, as well as increased reporting and help-seeking behavior related to IPV. This finding underscores the importance of providing women with concurrent support for both HIV prevention and IPV intervention, reducing the barriers to care that often arise when these issues are addressed in isolation.

In addition, gender-transformative interventions, which focus on altering power dynamics in relationships, have been instrumental in reducing both IPV and HIV vulnerability. Richter et al. (2014) [31] reported that

interventions targeting both men and women, such as the Stepping Stones program in South Africa, have successfully reduced IPV and promoted safer sexual practices. These interventions work by encouraging gender equality, improving communication between partners, and fostering mutual respect, which collectively contribute to a reduction in IPV and HIV risk.

Moreover, multi-sectoral interventions that combine healthcare, legal protection, and community mobilization have proven effective in addressing the dual challenges of IPV and HIV risk. For example, the "16 Days of Activism" campaign in South Africa, which integrated legal advocacy, community-based mobilization, and HIV care services, has been successful in both raising awareness and providing practical support for women affected by IPV. This comprehensive approach has shown promising outcomes in increasing women's

access to HIV testing, as well as providing legal resources to those experiencing violence [32].

Despite these successes, logistical barriers such as the cost of transportation, clinic accessibility, and the shortage of trained healthcare providers remain major obstacles to the widespread implementation of integrated interventions, particularly in rural areas. These barriers disproportionately affect women who experience IPV, as they often lack the financial means or transportation to access both HIV and IPV-related services. Studies by Decker et al. (2016) [24] and Ogbonnaya et al. (2022) [29] have highlighted that these logistical constraints severely limit the reach and effectiveness of integrated programs in underserved areas. Therefore, tailored interventions that consider both geographic and socio-economic factors are essential for ensuring the success and scalability of integrated models.

#### Discussion

## **Main Findings**

This study reveals the critical intersection between gender-based violence (GBV) and HIV risk among women in Sub-Saharan Africa. It demonstrates that women experiencing intimate partner violence (IPV) are associated with an increased risk of contracting HIV, which is compounded by socio-economic, cultural, and power-related factors. The study found that economic dependence, gender inequality, and limited access to HIV care were key barriers preventing women from escaping abusive relationships or accessing HIV treatment. Integrated interventions that simultaneously address GBV and HIV care have been shown to improve health outcomes for affected women, underscoring the need for multi-sectoral approaches in combating these intersecting public health crises.

These findings align with prior studies by Kouyoumdjian et al. (2013) [33] and Yonga, Kiss, and Onarheim (2022) [34], which have consistently highlighted the co-occurrence of IPV and HIV in Sub-Saharan Africa and have documented how IPV increases women's susceptibility to HIV through forced sex, physical trauma, and restricted access to protective measures. Similarly, Nabayinda et al. (2024) [35] emphasized the critical role of economic empowerment in reducing both GBV and HIV risk, highlighting that women's financial independence can significantly reduce their vulnerability to IPV. In addition, Cluver et al. (2023) [36] found that adolescent girls and young women are particularly vulnerable to both GBV and HIV, underscoring the need for targeted interventions addressing both risks in this demographic. These findings are in line with the results from the present study, which further demonstrate the importance of multi-sectoral interventions in addressing the co-occurrence of GBV and HIV. However, this study adds a unique dimension by emphasizing the role of socio-economic factors and cultural norms, which often inhibit women's ability to seek care. This aligns with UNAIDS' (2020) [10] findings on the exacerbating effects of gender inequality on the HIV epidemic.

The findings also resonate with the research of Kiruthu-Kamamia et al. (2025) [37] on integrating GBV prevention with HIV care programs, which have shown promise in improving engagement with HIV services and reducing IPV in other regions. The findings of this study call for a tailored, multi-sectoral approach to HIV prevention and care that incorporates IPV screening, gender-transformative interventions, and communitybased support. This approach aligns with global frameworks like the Sustainable Development Goals (SDGs), specifically Goal 5 on achieving gender equality and empowering all women and girls, as well as Goal 3 on ensuring healthy lives and promoting well-being for all at all ages [38]. By addressing the root causes of IPV and providing comprehensive HIV care, this study proposes actionable interventions that could significantly reduce the burden of both issues on women in Sub-Saharan Africa.

## Gaps in Evidence and Emerging Research Needs

Despite considerable progress in research, significant gaps remain, as most studies rely on cross-sectional data, which can only show associations rather than causality. This limitation makes it difficult to establish a direct causal relationship between GBV and HIV risk. Additionally, self-reported outcomes are vulnerable to social desirability bias and underreporting,

particularly given the stigma associated with both conditions. Longitudinal studies are needed to assess how GBV affects the progression of HIV care, particularly in terms of help-seeking behavior, access to care, and long-term adherence to antiretroviral therapy (ART).

Furthermore, research focusing on the role of male involvement in reducing GBV and HIV risk is critical, as interventions that target both men and women have shown promising results [39].

#### Strengths and Limitations

The key strengths of this study include its adoption of the Arksey and O'Malley (2005) [20] guidelines to synthesize the available evidence on the intersection of IPV and HIV risk. The search was conducted in multiple databases, resulting in a more comprehensive review. Additionally, the inclusion of African Journals Online ensured that studies from Sub-Saharan Africa were not unintentionally excluded. The study's reliance on peer-reviewed sources ensures the credibility and reliability of the data.

However, the key limitations of this study include the explicit focus on studies published in English from 2010 to the search date (September 8, 2025) and the exclusion of non-peer-reviewed sources, which may have provided further insights into community-based interventions that are often underreported. Moreover, the use of only three databases may limit the scope of the evidence, potentially affecting the comprehensiveness of the findings. However, PRISMA guidelines focus on the transparency and justification of the methods used, not the minimum number of databases [40]. Additionally, the heterogeneity of the populations studied (including female sex workers, postnatal women, HIVserodiscordant couples, and others) may limit the generalizability of the findings to other groups. The reliance on cross-sectional studies, self-reported data, and varying definitions of GBV across studies are important limitations to consider when interpreting the findings.

## Conclusion

This synthesis showed an association between gender-based violence (GBV) and HIV risk among women in Sub-Saharan Africa. The findings highlight that women exposed to GBV are more likely to experience increased vulnerability to HIV, with socio-economic, cultural, and power-related factors influencing this relationship. Integrated interventions combining GBV services with HIV care have been associated with improved health outcomes for women, particularly in regions with significant economic dependence and gender inequality. However, access to these integrated services remains limited, especially in rural areas where logistical challenges persist.

The review suggests that multi-sectoral approaches addressing both GBV and HIV are crucial for improving health outcomes for women in Sub-Saharan Africa. The evidence points to the importance of addressing socio-cultural and economic factors that drive both issues. Future research should focus on longitudinal studies to explore the long-term impact of integrated interventions and further investigate the role of male involvement in reducing GBV and HIV risk. Expanding these interventions, particularly in rural settings, could enhance the effectiveness of strategies aimed at improving the health and well-being of women in the region.

**Competing Interests:** All the authors declare that they have no conflict of interest.

Ethics approval and consent to participate: Not applicable, study follows the Arksey and O'Malley (2005) guidelines for scoping review.

**Consent for publication:** Not applicable.

**Availability of data and material**: All the resources consulted in the review are provided in the reference section.

**Funding:** No funding of any kind was received.

**Authors' Contributions:** This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

#### References

 Katende-Kyenda LN, Ani JI. Experiences of gender-based violence among women in sub-Saharan Africa: identifying evidence for intervention and public health priorities. Front Public Health. 2025 Feb 12;13:1492755. doi:10.3389/fpubh.2025.1492755

2. Ogunbambi T. Traditional Institutions as Change Agents: Understanding Cultural

- Norms and Practices Promoting Gender-Based Violence in Nigerian Communities [dissertation]. National Louis University; 2025. 916 p. Available
- from: https://digitalcommons.nl.edu/diss/916
- 3. Evcili F, Yildiz D. The Social Norms and Beliefs about Gender Based Violence Scale: A Turkish Validity and Reliability Study. J Appl Health Sci Med. 2025;5(6):1-7. Available from: <a href="https://www.jpub.org/journal-admin/uploads/articles/jahsm561.pdf">https://www.jpub.org/journal-admin/uploads/articles/jahsm561.pdf</a>
- 4. World Health Organization (WHO). Violence against women [Internet]. 2024 [cited 2025 Dec 25]. Available from: <a href="https://www.who.int/news-room/fact-sheets/detail/violence-against-women">https://www.who.int/news-room/fact-sheets/detail/violence-against-women</a>
- World Health Organization. Devastatingly pervasive: 1 in 3 women globally experience violence [Internet]. 2021 [cited 2025 Dec 25]. Available from: <a href="https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence">https://www.who.int/news/item/09-03-2021-devastatingly-pervasive-1-in-3-women-globally-experience-violence</a>
- Muluneh MD, Stulz V, Francis L, Agho K.
  Gender based violence against women in subSaharan Africa: a systematic review and metaanalysis of cross-sectional studies. Int J
  Environ Res Public Health. 2020 Feb;17(3):903.
  doi:10.3390/ijerph17030903
- 7. O'Mullan C, Sinai S, Kaphle S. A scoping review on the nature and impact of gender based violence on women primary producers. BMC Womens Health. 2024 Jul 9;24(1):395. doi:10.1186/s12905-024-03228-3
- 8. Airaoje OK, Uchendu CE, Akin-Odukoya OO, Aondover EM, Obada AA. Gender-Based Violence as a Public Health Crisis: Consequences for Nigerian Women and Society. Britain Int Humanit Soc Sci J. 2025 Jan 17;7(1):75-92. doi:10.33258/biohs.v7i1.1243
- 9. Friedberg R, Baiocchi M, Rosenman E, Amuyunzu-Nyamongo M, Nyairo G, Sarnquist C. Mental health and gender-based violence: An exploration of depression, PTSD, and anxiety among adolescents in Kenyan informal settlements participating in an empowerment intervention. PLoS One. 2023 Mar 29;18(3):e0281800. doi:10.1371/journal.pone.0281800

- UNAIDS. Women, adolescent girls and the HIV response [Internet]. 2020 [cited 2025 Dec 25]. Available from: <a href="https://www.unaids.org/sites/default/files/media\_asset/2020\_women-adolescent-girls-and-hiv\_en.pdf">https://www.unaids.org/sites/default/files/media\_asset/2020\_women-adolescent-girls-and-hiv\_en.pdf</a>
- 11. Sia D, Tchouaket ÉN, Hajizadeh M, Karemere H, Onadja Y, Nandi A. The effect of gender inequality on HIV incidence in Sub-Saharan Africa. Public Health. 2020 May 1;182:56-63. doi:10.1016/j.puhe.2020.01.014
- Reed DM, Radin E, Kim E, Wadonda-Kabondo N, Payne D, Gillot M, et al. Age-disparate and intergenerational sex partnerships and HIV: the role of gender norms among adolescent girls and young women in Malawi. BMC Public Health. 2024 Feb 22;24(1):575. doi:10.1186/s12889-024-17868-5
- Orchowski LM, Yusufov M, Oesterle D, Bogen KW, Zlotnick C. Intimate partner violence and coerced unprotected sex among young women attending community college. Arch Sex Behav. 2020 Apr;49(3):871-82. doi:10.1007/s10508-019-01537-5
- 14. Saaka SA, Pienaah CK, Stampp Z, Antabe R. Safe sex negotiation and HIV risk reduction among women: a cross-sectional analysis of Burkina Faso 2021 Demographic and Health Survey. PLOS Glob Public Health. 2024 Apr 24;4(4):e0003134. doi:10.1371/journal.pgph.0003134
- 15. Lomazzi V. The cultural roots of violence against women: individual and institutional gender norms in 12 countries. Soc Sci. 2023 Feb 24;12(3):117. doi:10.3390/socsci12030117
- 16. Smith SG, Sinkford JC. Gender equality in the 21st century: Overcoming barriers to women's leadership in global health. J Dent Educ. 2022 Sep;86(9):1144-73. doi:10.1002/jdd.13059
- 17. Beebeejaun-Muslum ZN. Gender Relation, Patriarchal Control, and Domestic Violence: A Qualitative Study in Mauritius. Eur J Humanit Soc Sci. 2024 Jun 21;4(3):9-19. doi:10.24018/ejsocial.2024.4.3.40
- 18. Mellar BM, Fanslow JL, Gulliver PJ, McIntosh TK. Economic abuse by an intimate partner and its associations with women's socioeconomic status and mental health. J Interpers Violence. 2024 Nov;39(21-22):4415-37. doi:10.1177/08862605241235140

- 19. Sherafat-Kazemzadeh R, Gaumer G, Hariharan D, Sombrio A, Nandakumar A. Between a Rock and a Hard Place: How poverty and lack of agency affect HIV risk behaviors among married women in 25 African countries: A cross-sectional study. J Glob Health. 2021 Oct 30;11:04059. doi:10.7189/jogh.11.04059
- 20. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. Int J Soc Res Methodol. 2005;8(1):19-32. doi:10.1080/1364557032000119616
- Pollock D, Peters MD, Khalil H, McInerney P, Alexander L, Tricco AC, et al.
   Recommendations for the extraction, analysis, and presentation of results in scoping reviews.
   JBI Evid Synth. 2023 Mar 1;21(3):520-32. doi:10.11124/JBIES-22-00123
- Alharbi A, Stevenson M. Refining Boolean queries to identify relevant studies for systematic review updates. J Am Med Inform Assoc. 2020 Nov;27(11):1658-66. doi:10.1093/jamia/ocaa148
- 23. DeMars MM, Perruso C. MeSH and text-word search strategies: precision, recall, and their implications for library instruction. J Med Libr Assoc. 2022 Jan 1;110(1):23. doi:10.5195/jmla.2022.1283
- 24. Decker MR, Lyons C, Billong SC, Njindam IM, Grosso A, Nunez GT, et al. Gender-based violence against female sex workers in Cameroon: prevalence and associations with sexual HIV risk and access to health services and justice. Sex Transm Infect. 2016 Dec 1;92(8):599-604. doi:10.1136/sextrans-2015-052463
- 25. Settergren SK, Mujaya S, Rida W, Kajula LJ, Kamugisha H, Kilonzo Mbwambo J, et al. Cluster randomized trial of comprehensive gender-based violence programming delivered through the HIV/AIDS program platform in Mbeya Region, Tanzania: Tathmini GBV study. PLoS One. 2018 Dec 6;13(12):e0206074. doi:10.1371/journal.pone.0206074
- Tsai AC, Subramanian SV. Proximate context of gender-unequal norms and women's HIV risk in sub-Saharan Africa. AIDS.
   2012;26(3):381-6.
   doi:10.1097/QAD.0b013e32834e1ccb

- 27. Shamu S, Shamu P, Zarowsky C, Temmerman M, Shefer T, Abrahams N. Does a history of sexual and physical childhood abuse contribute to HIV infection risk in adulthood? A study among post-natal women in Harare, Zimbabwe. PLoS One. 2019 Jan 4;14(1):e0198866. doi:10.1371/journal.pone.0198866
- 28. Mashaphu S, Wyatt GE, Gomo E, Tomita A. Intimate partner violence among HIV-serodiscordant couples in Durban, South Africa. S Afr Med J. 2018 Nov 7;108(11):960-4. doi:10.7196/SAMJ.2018.v108i11.13095
- 29. Ogbonnaya IN, Reed E, Wanyenze RK, Wagman JA, Silverman JG, Kiene SM. Perceived barriers to HIV care and viral suppression comparing newly diagnosed women living with HIV in rural Uganda with and without a history of intimate partner violence. J Interpers Violence. 2022 Oct;37(19-20):NP17133-56. doi:10.1177/08862605211028284
- 30. Roberts ST, Flaherty BP, Deya R, Masese L, Ngina J, McClelland RS, et al. Patterns of gender-based violence and associations with mental health and HIV risk behavior among female sex workers in Mombasa, Kenya: a latent class analysis. AIDS Behav. 2018
  Oct;22(10):3273-86. doi:10.1007/s10461-018-2107-4
- 31. Richter L, Komárek A, Desmond C, Celentano D, Morin S, Sweat M, et al. Reported physical and sexual abuse in childhood and adult HIV risk behaviour in three African countries: findings from Project Accept (HPTN-043). AIDS Behav. 2014 Feb;18(2):381-9. doi:10.1007/s10461-013-0439-7
- 32. Government of South Africa. 16 Days of Activism [Internet]. 2024 [cited 2025 Dec 25]. Available from: <a href="https://www.gov.za/16DaysOfActivism2024">https://www.gov.za/16DaysOfActivism2024</a>
- 33. Kouyoumdjian FG, Findlay N, Schwandt M, Calzavara LM. A systematic review of the relationships between intimate partner violence and HIV/AIDS. PLoS One. 2013;8(11):e81044. doi:10.1371/journal.pone.0081044
- 34. Yonga AM, Kiss L, Onarheim KH. A systematic review of the effects of intimate

- partner violence on HIV-positive pregnant women in sub-Saharan Africa. BMC Public Health. 2022 Feb 3;22(1):220. doi:10.1186/s12889-022-12619-w
- 35. Nabayinda J, Witte SS, Kizito S, Nanteza F, Nsubuga E, Bahar OS, et al. The impact of an economic empowerment intervention on intimate partner violence among women engaged in sex work in southern Uganda: A cluster randomized control trial. Soc Sci Med. 2024 May 1;348:116846. doi:10.1016/j.socscimed.2024.116846
- 36. Cluver LD, Zhou S, Orkin M, Rudgard W, Meinck F, Langwenya N, et al. Impacts of intimate partner violence and sexual abuse on antiretroviral adherence among adolescents living with HIV in South Africa. AIDS. 2023 Mar 1;37(3):503-11. doi:10.1097/QAD.0000000000003440
- 37. Kiruthu-Kamamia C, Viola E, Sande O, Kumwenda T, Lungu J, Diele J, et al. Integrating Gender-Based Violence Services

- Into HIV Care: Insights From Malawi. Glob Health Sci Pract. 2025 Aug 14;13(1). doi:10.9745/GHSP-D-24-00177
- 38. Sorooshian S. The sustainable development goals of the United Nations: A comparative midterm research review. J Clean Prod. 2024 May 10;453:142272. doi:10.1016/j.jclepro.2024.142272
- 39. Cordeiro AA, Moorhouse L, Dadirai T, Maswera R, Chang AY, Nyamukapa C, et al. Intimate partner violence, behaviours associated with risk of HIV acquisition and condom use in married women in Manicaland, East Zimbabwe: An HIV prevention cascade analysis. BMC Womens Health. 2024 Nov 6;24(1):592. doi:10.1186/s12905-024-03428-x
- 40. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med. 2018 Oct 2;169(7):467-73. doi:10.7326/M18-0850