Master of Public Health

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HIV Prevention through Sexual Health Intervention among Youth (15-24 years) in Sub-Saharan Africa: A Scoping Review of Existing Efforts

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LIST OF ACRONYMS

ABYM	Adolescent Boys and Young Men
AGYM	Adolescent Girls and Young Women
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARVs	Antiretrovirals
ASRH	Adolescent Sexual and Reproductive Health
AYA	Adolescents and Youth
BIAS	Botswana Impact HIV/AIDS Survey
ESA	Eastern and Southern Africa
FSW	Female Sex Workers
HCT	HIV Counselling and Testing
HIV	Human Immunodeficiency Virus
KPs	Key populations
MoH	Ministry of Health
MSM	Men Who have Sex with Men
NACC	National AIDS Control Council
NSP	National Strategic Plan
PEPFAR	United States President's Emergency Plan for AIDS Relief
PLHIV	People Living with HIV
PMTCT	Preventing Mother-To-Child Transmission
PrEP	Pre-Exposure Prophylaxis
PRISMA-ScR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews
PWID	People Who Inject Drugs
SRHS	Sexual and Reproductive Health
SSA	Sub-Saharan Africa
STIs	Sexually Transmitted Infections
THIS	Tanzania HIV Impact Survey
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
VMMC	Voluntary Medical Male Circumcision
WCA	West and Central Africa
WHO	World Health Organization
YPLHIV	Young People Living with HIV

ABSTRACT

Introduction: Human Immunodeficiency Virus (HIV) remains a significant public health challenge in Sub-Saharan Africa (SSA), particularly among young people aged 15-24, despite progress in recent years. Sexual health and education interventions prove to be an effective way of targeting this demographic, yet little is known of the strategies already in place in SSA in order to assess their efficacy. To address this, we conducted a scoping review focusing on five priority countries in SSA: Kenya, Tanzania, Botswana, Eswatini, and South Africa.

Methods: We conducted a scoping review using the PRISMA-ScR checklist, focusing on studies published in the ten-year period between January 2013 and December 2023. Eligibility criteria included studies addressing HIV prevention/treatment, involving interventions related to sexual health, within a study population aged 15 to 24 years, and conducted in Kenya, Tanzania, Botswana, Eswatini, or South Africa. Additionally, studies had to be published in English. Exclusion criteria comprised observational studies, studies not within the specified age range or geographic scope, multi-country studies involving countries outside the selected ones, and non-English articles. The screening process involved title and abstract screening followed by full-text screening.

Results: Our search strategy yielded 2,494 records from database searches and an additional 15 from gray literature. After identifying and removing duplicate records, 2,362 unique records remained. Following title and abstract screening, 215 records underwent full-text screening, with 196 records excluded. Ultimately, 19 studies met all inclusion criteria and were included in the final synthesis. Findings from the review revealed positive impacts on healthcare access, economic empowerment, antiretroviral therapy (ART) adherence rates, mental health outcomes, and reduced HIV transmission risks among young people.

Conclusion: The study highlights the importance of comprehensive, sustained, and multifaceted approaches in HIV prevention and intervention efforts. Recommendations for future interventions include prioritizing broader demographic groups, segmenting interventions by age groups, integrating diverse strategies, incorporating long-term follow-up in evaluations, and sustaining research efforts to address the unique vulnerabilities of young people in SSA.

Keywords: HIV prevention, youth, Sub-Saharan Africa, interventions, scoping review

1 INTRODUCTION

1.1 Human Immunodeficiency Virus in Sub-Saharan Africa

Human Immunodeficiency Virus (HIV) continues to be a significant global public health concern, with an estimated 39 million people living with the virus globally as of 2022, according to the Joint United Nations Programme on HIV/AIDS (UNAIDS) (1). HIV ranks among the most fatal infectious diseases worldwide, particularly in Sub-Saharan Africa (SSA), where its impact on health outcomes and life expectancy has been profound in recent years (2). Out of the global population of 39 million people living with HIV (PLHIV), 25.6 million reside in SSA (3). In SSA, HIV is primarily transmitted through heterosexual contact, mother-to-child transmission during pregnancy, childbirth, or breastfeeding, and to a lesser extent, through injecting drug use and unsafe medical practices (3, 4).

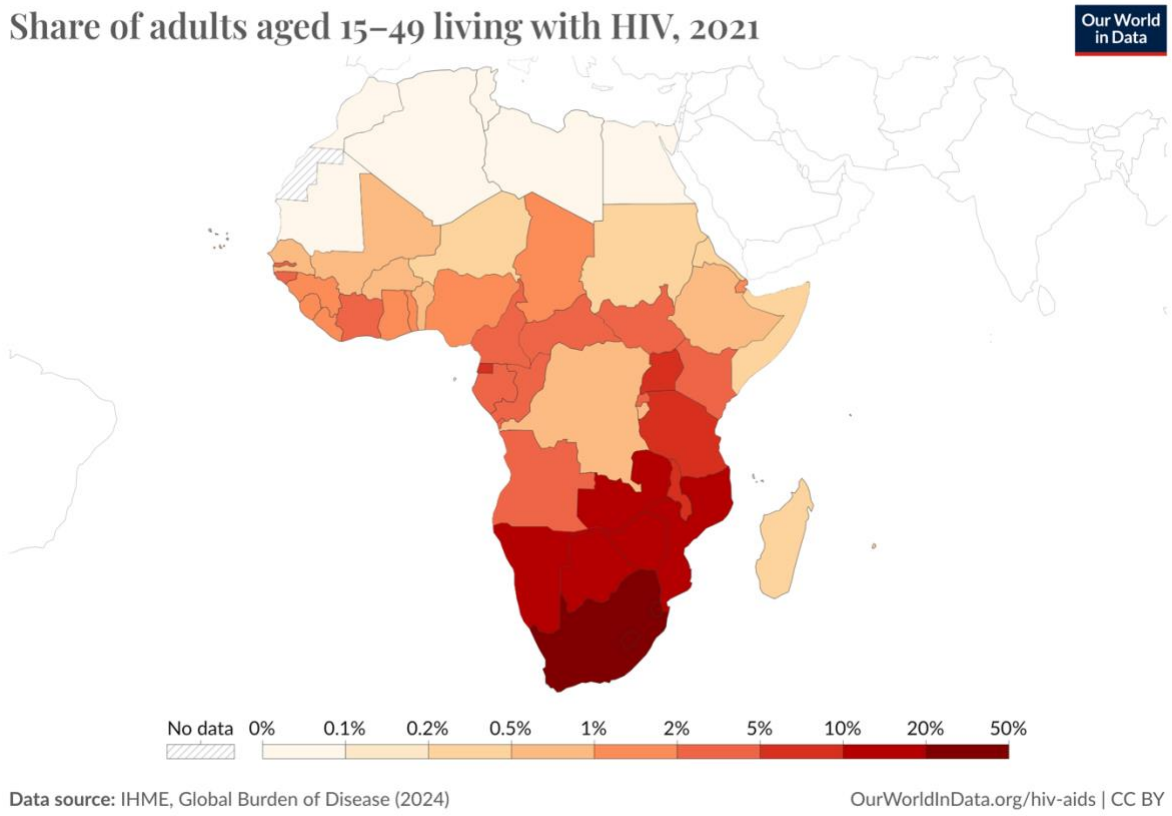

Figure 1. Share of adults aged 15-49 living with HIV, 2021 (2)

From 2010 to 2022, notable changes occurred in the transmission of new HIV infections across SSA, with annual new cases decreasing by 600,000, from 1.1 million to 510,000 (5). Eastern and Southern Africa (ESA) and Western and Central Africa (WCA) experienced significant declines, with new infections dropping by 57% in ESA and 49% in WCA during this period (6, 7). Despite these reductions, HIV remains a major concern in both regions. In 2022, ESA accounted for 20.8 million of the 25.6 million PLHIV in SSA, while WCA had 4.8 million (3).

Moreover, ESA and WCA together reported 660,000 new infections in 2022 (8), approximately half of all new global infections, and about 380,000 HIV-related deaths (3). Table 1 below illustrates the national prevalence rates in SSA, showing significantly higher prevalence rates in ESA compared to WCA.

Region	*Country*	*Prevalence rate (%)*	*Source*
Eastern Africa	Kenya	3.7	(9)
	Tanzania	4.4	(10)
Southern Africa	Botswana	20.8	(11)
	Eswatini	25.9	(12)
	South Africa	12.7	(13)
West Africa	Ghana	1.7	(14)
	Senegal	<1	(15)
Central Africa	Burundi	1.0	(16)
	Democratic Republic of Congo	1.2	(17)
	Rwanda	1.6	(18)

Table 1. HIV Prevalence rates in selected SSA countries, 2022

The high prevalence of HIV is exacerbated by factors such as low condom use, multiple sexual partnerships, and socio-economic challenges like poverty and gender inequality (4). As a sexually transmitted disease, HIV spreads through unprotected sexual intercourse, highlighting the importance of preventive measures such as safe sexual practices and appropriate sexual education (19).

To effectively address the HIV epidemic, the UNAIDS 95-95-95 target set ambitious goals to ensure that by 2030, 95% of people living with HIV know their status, 95% of those diagnosed receive antiretroviral therapy (ART), and 95% of those on treatment achieve viral suppression (20). This aligns with initiatives like the 2025 HIV Prevention Roadmap, which aims to support vulnerable countries in eradicating HIV through precision prevention responses. The Roadmap focuses on targeting 95% of at-risk individuals to utilize effective combination prevention strategies, with the overarching objective of reducing annual new infections to fewer than 370,000 by 2025 (21). Achieving epidemic control by 2030 requires prioritizing HIV prevention and treatment programs for high-risk populations, particularly the youth (22).

1.2 HIV and Sexual and Reproductive Health among Youth

The United Nations (UN) defines youth as individuals aged 15–24 years. This age group makes up 1.2 billion people globally (23), with 20% of these young people living in SSA, a demographic trend projected to increase over the next two decades (24). Consequently, a sizable cohort within this region is either embarking on or navigating the early stages of their sexual lives. Adolescent sexual and reproductive health (ASRH) remains a considerable public health concern in SSA, particularly in terms of preventing sexually transmitted infections (STIs), including HIV (25). These young individuals face heightened susceptibility to HIV infection and encounter challenges related to sexual and reproductive health (SRH). Contributing factors include typical risk-taking behaviors inherent to adolescence—such as sexual experimentation and alcohol consumption—as well as a myriad of individual, societal, and structural factors. These include limited awareness or knowledge of SRH issues and inadequate ASRH services, economic hardship, and gender disparities (26).

The UNAIDS 2023 global report has highlighted significant reductions in HIV infections among young people aged 15-24 years in the past ten years. Despite a decrease of 46% in new HIV infections among youth populations worldwide in the last decade, the decrease has not been evenly distributed globally. While certain regions have had huge decreases, there has been minimal advancement in addressing HIV infections in youth populations and especially among young key populations (KP) in SSA countries (27). In 2019, the ESA region had an estimated 1.2 million adolescents (aged 10–19 years) and 2.2 million young people living with HIV (YPLHIV) (aged 15–24 years). Around 110,000 new HIV infections were reported among adolescents, and 260,000 among young people during the same year (28). Within ESA, approximately 97,000 new HIV infections occurred among adolescent girls, and 110,000 among young women. Particular attention must be given to preventing new infections among females in this age group in SSA who comprise 77% of new HIV cases (28).

In SSA, young females between the ages of 15 and 24 are twice as likely as their male counterparts to contract HIV, rendering them the most susceptible group to infection within this demographic (28). According to Boothe et al. (2021), one fundamental aspect of an HIV response for the youth category involves prioritizing the most vulnerable groups, including young KP such as men who have sex with men (MSM), female sex workers (FSW) and people who inject drugs (PWID) as well as other young vulnerable groups such as child brides, out-of-school young people and young people with disabilities. As previously mentioned, young KP face elevated risks of HIV infection due to their engagement in high-risk sexual and drug-related behaviors, often initiated during adolescence (27). Additionally, they encounter social vulnerabilities typical of youth, including power imbalances and detachment from social

support networks, which can contribute to heightened risk behaviors such as early sexual initiation, unprotected sex, illicit drug use, and unsafe injection practices (29). Furthermore, stigma and discrimination are particularly pronounced among this age group, compounded by experiences of criminalization, educational isolation, bullying and harassment, further preventing them from adequate access to quality health services (29).

1.3 HIV Responses in SSA

The significant prevalence of HIV in SSA countries has led to major investments in population-based methods to reduce its transmission, including both biological and behavioral interventions. Both domestic and international donors, such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria, as well as the United States President's Emergency Plan for AIDS Relief (PEPFAR), continue to offer substantial financial and human resources assistance for HIV initiatives in SSA. However, over the years, there has been a decrease in international support for HIV programs in Africa, which has the potential to hinder the progress towards UNAIDS' ambitious targets to eliminate the epidemic in the region by 2030 (20).

ESA has shown notable advancements in decreasing new HIV infections and AIDS-related deaths even though the advancements differ between countries (20). Botswana and Eswatini (formerly known as Swaziland until 2018), among the top four countries globally with the highest HIV prevalence rates, along with Tanzania, are three out of only five countries in SSA to have met the UNAIDS 95-95-95 targets (30). Below is a summary of how these five countries in SSA have been tackling HIV prevention.

Eswatini

In 2020, Eswatini became the first country in SSA to reach the UNAIDS 95-95-95 targets. The strides can be attributed to investments in HIV prevention and treatment programs focusing on vulnerable and hard-to-reach populations (31). Success was also achieved through strong political leadership, particularly from the Ministry of Health (MoH), and support from international organizations like the World Health Organization (WHO) (32).

WHO recommendations have guided the country's health programs, leading to revisions of national strategic plans and treatment guidelines tailored to Eswatini's epidemic status. The country has been proactive in adopting WHO HIV treatment recommendations, implementing policies such as the “treat-all” policy and task shifting of HIV testing services. These efforts, supported by partners like PEPFAR and the Global Fund, have led to improved access to treatment and care services, decentralization of ART initiation and follow-up care, and wider access to viral load monitoring and adherence support (32). Additionally, Eswatini provides

free primary healthcare, including ART, further facilitating access to essential services (33). Despite these achievements, Eswatini still aims to address disparities across all population groups and sustain its gains by building a resilient, patient-centered health system and continuing to adopt evidence-based recommendations from WHO (32). Despite high access to ART for pregnant women, challenges persist in ensuring effective follow-up of mother-baby pairs post-delivery, leading to elevated transmission rates post-breastfeeding. Additionally, social-cultural barriers to sexual behavior change, limited coordination mechanisms, absence of real-time data for monitoring progress, and lack of adolescent-friendly health services further impede HIV prevention efforts. Overstretched health facilities and workers have been reported as challenges faced by adolescents in accessing vital information, counseling, and care (34).

Botswana

Botswana's successful response to HIV/AIDS is attributed to sustained political will, strong domestic investment, collaborative partnerships, and evidence-based strategies (35). The country's efforts began with the Masa program in 2000, providing free ART to citizens. Subsequent initiatives, such as the Option B+ - treating all pregnant and breastfeeding HIV-positive women with lifelong triple ART regimen and the “Treat All Strategy” - providing free, universal HIV treatment to all individuals in Botswana regardless of disease progression, further enhanced access to treatment (35). Botswana also invested heavily in laboratory infrastructure and international expertise, leading to significant progress in reducing mother-to-child transmission. Domestic investments played a crucial role, with over US$100 million allocated to HIV projects, primarily from the national government (35). Additionally, advocacy for the decriminalization of same-sex relationships contributed to improved access to care. Despite these achievements, challenges persist, as highlighted by the Botswana Impact HIV/AIDS Survey (BIAS), which identified high prevalence among specific vulnerable groups, particularly young people aged 15-24, including adolescent girls and young women within this demographic. However, the survey did not ascertain the reasons behind this prevalence and recommended additional studies to delve into the underlying factors (35).

Tanzania

Tanzania has surpassed the second UNAIDS target ahead of schedule, with 95% of HIV-positive individuals receiving ART at no cost through public-sector healthcare facilities, as revealed by the 2022-2023 Tanzania HIV Impact Survey (THIS) (36). The government's response to the HIV epidemic includes policies and programs such as index testing, an efficient method for identifying undiagnosed HIV cases across different demographics and ages; social network strategies, using social connections to refer high-risk individuals for HIV testing; multi-month supply of ART and rapid expansion of dolutegravir-containing treatment regimens and

voluntary medical male circumcision (VMMC). Political will, stakeholder engagement, and dedicated healthcare providers have been crucial to this achievement, along with revised policy guidelines and improved data systems for key and vulnerable populations (36).

Tanzania plans to enhance differentiated HIV treatment domains and incorporate new WHO recommendations, aiming to expand eligibility criteria and integrate service delivery data into the central electronic health management system (36). Despite progress, gaps in HIV control persist, including variations in prevalence by demographic factors and regions, as well as challenges related to funding sustainability and resource mobilization. Among young people in Tanzania, several factors contribute to the high prevalence of HIV. These include limited autonomy in decision-making, substance misuse, inadequate knowledge about HIV and SRH, and household poverty. These challenges collectively hinder effective HIV prevention and control efforts, heightening the vulnerability of this population to the virus (37).

South Africa

South Africa's HIV response faced significant challenges during the 1980s and 1990s due to limited understanding and societal stigma. These efforts focused on condom use, safe-sex education, and home-based care (38). Conflict arose over the introduction of antiretrovirals (ARVs) for preventing mother-to-child transmission (PMTCT), but a policy shift in 2002 acknowledged the link between HIV and AIDS. By 2004, a free nationwide ART program was approved, with ARV initiation starting in 2005. Donors like PEPFAR and the Global Fund supported interventions, including treatment access for foreign nationals (38).

In 2006, a new National Strategic Plan (NSP) aimed to provide ARVs to 80% of eligible individuals, leading to significant enrollment by 2007 (38). A leadership transition in 2008 brought renewed focus on HIV, with the new government acknowledging its importance. A massive HIV counseling and testing (HCT) campaign was launched in 2009, accompanied by efforts to scale up medical male circumcision. By 2010, significant progress was made in expanding treatment access, with guidelines revisions and increased focus on vulnerable groups. The launch of a third NSP in 2011 emphasized inclusion and acceleration of the HIV program, resulting in a notable increase in treatment coverage by mid-2013 (38).

South Africa's HIV response is hindered however by stalled treatment scale-up and insufficient progress in reducing new infections. While the government has supportive policies in place, challenges in implementation persist due to resource constraints, health worker shortages, and competing priorities like non-communicable diseases (39). Scaling up prevention programs and addressing the needs of young adults are particularly challenging. These challenges

include gaps in understanding the epidemiological and behavioral profiles of young populations, complexities in conducting HIV research with adolescents and young people, and discriminatory and contradictory age-related laws and policies regarding consent to sex, access to HIV testing and counseling, and SRH services (40). Effective implementation requires political will at provincial and district levels to overcome decentralized health system barriers (39).

Kenya

Kenya has achieved significant success in HIV prevention, with new infections decreasing substantially since the peak in 1993. This progress is attributed to the efforts of the National AIDS Control Council (NACC) and the implementation of the Prevention Revolution Roadmap and Kenya AIDS Strategic Framework (41). The country has undertaken various initiatives such as promoting condom use, HIV education in schools, and eliminating mother-to-child transmission. Additionally, Kenya has adopted voluntary medical male circumcision, harm reduction programs, and pre-exposure prophylaxis (PrEP) to reduce transmission among high-risk populations (41).

In terms of treatment, Kenya has expanded access to free ART. However, challenges exist, particularly in ensuring adherence among adolescents and young people. Limited knowledge on HIV prevention interventions, lack of access to prevention methods like condoms, and economic vulnerability contribute to risky behaviors among young people. Additionally, barriers such as lack of access to education, harmful gender dynamics, stigma, discrimination, and substance abuse exacerbate their vulnerability to HIV (42). Moreover, funding for the HIV response is a significant challenge, with a large portion relying on external sources. Although government spending has increased, dwindling funds from international donors threaten the sustainability of Kenya's HIV response (41).

1.4 Gaps in HIV Prevention

This evidence pertaining to HIV responses in SSA demonstrates significant gaps when it comes to targeting youth populations through sexual health interventions and education in these 5 different countries. While effective interventions, practices, and policies have been identified to enhance outcomes along the HIV prevention/treatment continuum for both PLHIV and those at risk of acquiring it, their implementation and adoption among young people in certain contexts of SSA have been limited due to varying factors, including structural and behavioral factors (43). Previous studies aimed at understanding why interventions targeting youth in SSA have not had any significant impact have identified various shortcomings,

including misalignment with theoretical frameworks, focusing on older adolescents rather than younger, not-yet sexually active ones, and a narrow emphasis on individual determinants of sexual behavior. Additionally, implementation bottlenecks and the use of intervention models originating from the West, have failed to yield similar positive results in SSA. Consequently, there have been calls to target younger adolescents or, at the very least, tailor interventions to specific youth age groups (44).

1.5 Rationale of the Study

Given the persistent challenges posed by HIV in SSA, it is evident that there is a crucial need to focus on HIV prevention among young people (15-24 years) specifically in order to combat this preventable disease, particularly in terms of sexual health intervention and education. The data above suggest that HIV has a greater impact on young individuals who contribute significantly to the number of new infections in the region (27). Michielsen et al. (26) noted that while previous reviews have assessed HIV prevention interventions for young people, these evaluations have varied in their thematic, geographic, and methodological focus. Moreover, none of these reviews specifically concentrated on sexual health-related HIV prevention efforts targeting young people in SSA, where the prevalence is the highest (26). Hence, it is imperative to assess the efficacy of the HIV prevention efforts that explicitly focus on young people (15-24 years) in SSA to help understand their effects and pinpoint potential areas for improvement.

This research targets five countries: Kenya, Tanzania, Botswana, Eswatini, and South Africa. These countries have been identified as priority countries for HIV, where three out of four new infections occur in SSA (21). The highest burden of HIV among young people in SSA is observed within the ESA region, where these countries are located. These countries are all English-speaking countries in SSA, making it easier to access policies and programs communicated in English for the purpose of this thesis.

Although youth populations are acknowledged as a priority, they continue to be left behind (45). As evidenced above, young people face elevated HIV risks across all five countries, underscoring the need for tailored interventions (34, 35, 37, 40, 42). Nkambule et al. (46) assert that there is an unequal distribution of successful HIV prevention efforts among young people, highlighting a lack of understanding regarding the most suitable strategies for specific populations or regions (46). Therefore, using a multi-country approach, this research aims to assess HIV prevention initiatives in the selected countries to understand their strategies and highlight challenges both at the country level and within the broader regional context. Furthermore, this work adds to the wider discussion on HIV research by emphasizing the

significance of tailored interventions for vulnerable populations, such as young people. This research aims to reveal not only gaps and obstacles in current prevention tactics, but also aims to highlights potential for innovation and improvement in HIV prevention programming in SSA. Michielsen et al. (26) found that numerous reviews on HIV prevention interventions for young people conducted between 2000 and 2010 focused on specific settings, like schools, or tools, such as mass media, or particular behaviors, like condom use. This trend has persisted, with recent reviews continuing to being specialized. A recent scoping review, for instance, emphasizes the nature of implementation research in addressing HIV prevention and treatment among adolescents and youth (AYA) in SSA (47). However, a comprehensive review capturing the full spectrum of HIV prevention interventions targeting sexual health with the diverse contexts, methodologies, and identifying the unique vulnerabilities of young people in SSA is lacking. This scoping review aims to provide an integrative perspective, highlighting best practices and gaps, and offering insights essential for adapting and scaling interventions. Additionally, it seeks to inform future research and policy development by identifying the unique vulnerabilities faced by young people in this region.

1.6 Research Question, Aim, and Objectives

Research Question:

What HIV prevention efforts targeting sexual health in youth (ages 15-24) have been implemented in Sub-Saharan Africa and what have been their main outcomes, facilitators and barriers?

Aim:

Therefore, the aim of this study is to assess the HIV prevention efforts targeting sexual health for young people in Sub-Saharan Africa, with a focus on five selected countries: Kenya, Tanzania, Botswana, Eswatini and South Africa.

Objectives:

Main Objectives

1. To assess available HIV prevention efforts targeting sexual health in young people, aged 15-24 years in Kenya, Tanzania, Botswana, Eswatini and South Africa.
2. To identify gaps and challenges in these existing strategies.

Secondary Objectives

1. To assess the factors associated with successful prevention of HIV in youth in these SSA countries.

2. To provide recommendations for enhancing HIV prevention efforts targeting sexual health in young people in SSA based on the findings of the study.

2 METHODS

2.1 Study Design

To answer the research question and meet the study objectives, a scoping review of the five selected countries mentioned above was conducted. A scoping review methodology was deemed well-suited for the aims of this research because it enabled a comprehensive synthesis of the available literature on existing interventions in our targeted population on existing interventions, thus identifying key themes and gaps in the different countries as well as methodological approaches pertaining to the given topic (48).

The scoping review was guided by the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) checklist (48). We adhered to the Arksey and O'Malley framework (49), which includes: (1) defining a research question, (2) identifying relevant studies, (3) selecting studies that meet eligibility criteria, (4) extracting and charting data, and (5) summarizing, analyzing, and reporting the results.

2.2 Eligibility criteria

The inclusion criteria were limited to studies addressing HIV prevention/treatment, involving an intervention, or evaluating an intervention related to sexual health (including pilot or ongoing interventions), within a study population of young people aged 15 to 24 years. Included studies were also limited to the five selected SSA countries, published between January 2013 and December 2023, and published in English.

Exclusion criteria were as follows: strictly observational studies, studies that did not focus on our defined age range, multi-country studies involving countries outside the five selected, non-English language articles, and studies where HIV prevention/treatment interventions were not related to sexual health.

Exceptions were made for some articles due to limited availability of studies focusing on HIV prevention for young people our specific age range. The populations included in these articles ranged from a minimum of 10 years old to a maximum 29 years, slightly outside our intended age group.

2.3 Search Strategy

The search strategy was initially drafted by the main researcher, AG, a seasoned postdoctoral researcher and sexologist. FS, an M2 Master of Public Health (MPH) student from EHESP and thesis author, performed a preliminary literature search in April 2024. Databases such as PubMed, ScienceDirect, Google Scholar, Cochrane Library, and EMBASE were utilized. Additionally, gray literature was searched on Google and organizational websites like UNAIDS. AG and FS collaboratively defined the final search strategy, combining similar terms with the Boolean operator "OR" and different terms with "AND."

Boolean Operators and Keywords

Study population terms	Adolescent OR teen OR young person OR young people OR youth OR adolescent girl OR girls OR adolescent boy OR boys OR OR adolescent and youth OR AYA or adolescent girls and young women OR AGYW OR adolescent boys and young men OR ABYM
Topical terms	Sexual health OR sexual education OR reproductive health OR reproduction OR sex ed OR sex education OR sexuality OR sexual and reproductive health OR SRH OR SRHR AND HIV OR HIV/AIDS AND Prevention OR policy OR policies OR program OR programs OR intervention OR strategies OR youth program
Geographic terms	Sub-Saharan Africa OR Africa OR SSA AND Kenya AND Tanzania AND South Africa AND Botswana AND Eswatini AND Swaziland

Table 2. Keywords and search strategy

2.4 Selection of sources of evidence

The screening process was performed by the two reviewers, AG and FS. Initially, FS identified abstracts that met the inclusion criteria and included those with unknown or missing information for further screening. The records were then exported into Rayyan, a web-based tool for screening and duplicate removal. AG and FS collaboratively screened the titles and abstracts, eliminating duplicates. Subsequently, full-text screening was conducted for the included studies. Any disagreements were resolved through consensus and discussion.

2.5 Data extraction and charting

Data was extracted into Microsoft Excel using an established codebook by the two reviewers. Information collected from the articles included: author, year, country, study population, sample size, objective, strategies, model or framework, outcome, result and limitations/gaps. The reviewers jointly screened the data to identify discrepancies and resolved them by consensus.

3 RESULTS

3.1 Selection of sources of evidence

Our search strategy yielded 2,494 records from database searches and an additional 15 from gray literature. After identifying and removing 147 duplicate records, 2,362 unique records remained. This followed title and abstract screening, which led to the exclusion of 2,147 records that did not meet our inclusion criteria.

We then proceeded to a full-text screening of the remaining 215 records to determine their eligibility. During this phase, 196 records were excluded for various reasons: 57 records were not related to HIV prevention interventions, 73 had the wrong study population, 24 had the wrong study design, and 42 were conducted outside of SSA. Ultimately, 19 studies met all the inclusion criteria and were included in the final analysis. The PRISMA flowchart in Figure 2 below provides a breakdown of the selection of articles included in the synthesis.

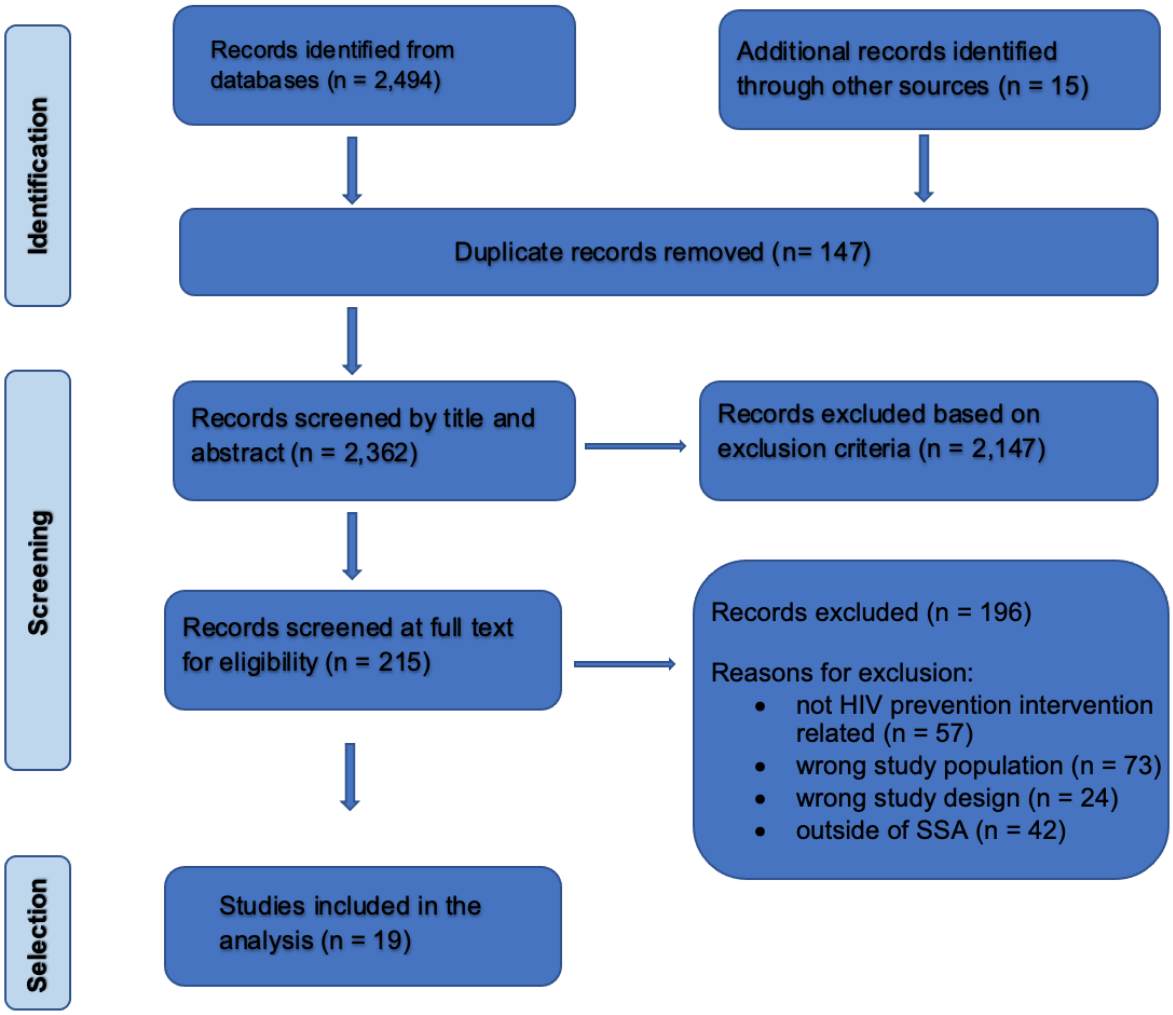

Figure 2. PRISMA flowchart

3.2 Study Characteristics

In this scoping review, the age ranges covered by the 19 articles vary, reflecting the diversity of target populations in HIV interventions. Table 3 shows the data extracted from the 19 included articles in this scoping review. The majority of articles focus on individuals aged 15-24, with four articles specifically targeting this age range, followed by three articles targeting individuals aged 12-24. Other articles include narrower or broader age ranges such as 12-16, 14-19, 13-19, 18-24, 15-25, 16-24, 10-24, 13-25, 12-20, 15-22, 15-23 and 16-29. One article extends the lower age to 10 and another with an upper age limit of 29 years old. The countries with the highest representation in terms of geography were Kenya and South Africa, each with 26.32% of identified articles. Tanzania, Eswatini, and Botswana followed, each accounting for 15.79% of the articles.

The 19 included articles were categorized into seven thematic areas of sexual health-related HIV interventions targeting adolescents and young people in SSA (Table 3). Five articles (26%) evaluated the effectiveness, feasibility, and acceptability of cash transfer programs, with Two articles (11%), investigated interventions to improve adherence to ART among young people living with HIV. Another two articles (11%), focused on peer support and engagement interventions among adolescents and young people living with HIV. Four articles (21%) examined several different HIV prevention strategies targeting young people. Another four (21%) assessed the impact of healthcare interventions, services, and programs on HIV-related outcomes among adolescents and young people. One article (5%) developed and evaluated a training method to increase the reach of oral self-implemented testing. Lastly, one (5%) examined the feasibility of using social support networks as a recruitment method for interventions among marginalized young women.

3.3 Outcomes and Strategies of HIV Prevention Efforts among Youth in SSA

Our stated objectives included assessing the factors associated with successful HIV prevention among youth in SSA. We determined success by the outcomes: acceptability and feasibility, guided by the Implementation Outcomes Framework by Proctor et al. (50)

Acceptability is the extent to which implementation stakeholders find a treatment, service, practice, or innovation to be agreeable, satisfactory, or palatable whereas feasibility is the degree to which a new treatment or innovation can be effectively implemented or executed within a specific agency or setting (50). Overall, our review identified that only 2 articles demonstrated acceptability alone, 9 articles demonstrated both acceptability and feasibility, and 8 articles demonstrated feasibility alone.

Regarding the strategies used, 18 articles engaged the target population, one article engaged the target population and also trained and educated stakeholders, one article engaged the target population and used evaluative strategies, and another used only evaluative strategies.

Table 3. Summary of HIV prevention interventions for youth in SSA between 2013-2023 (n=19)

Author (Year)	Country	Study Population (Years)	Sample Size	Objectives	Strategies	Model or Framework	Outcomes	Results	Limitations
(Brault et al., 2022) (51)	Eswatini	15-24 AGYW	1,722	To describe the effectiveness of the Girl Champ pilot in terms of reach and associated changes in uptake of services	Engage population Train and educate stakeholders	None	Acceptability Feasibility	- No significant change in the number of healthcare visits - Significant increase in HCT visits	- Lack of clinic participation - Social desirability bias
(Ness et al., 2021) (52)	Eswatini	13-25 YPLHIV	20	To determine the impact of creative expression and peer support on treatment and feelings of stigma	Engage population	None	Acceptability Feasibility	- Decrease in stigma - Positive impact on viral load, teamwork, friendship, and community	Possible response bias due to voluntary participation
(Gorgens et al., 2020) (53)	Eswatini	15-22 AGYW	4,389	To assess the impact of incentives for education attendance/enrolment and remaining STI negative on HIV incidence	Use evaluative strategies	None	Acceptability Feasibility	- Positive outcomes in school enrollment and STI testing - Reduced HIV incidence	- Selection bias due to frequent movement of participants - Reporting bias due to self-reported data
(Catania et al., 2021) (54)	Tanzania	14-19 Low-income, orphaned, and homeless youth	257	To develop a training method to increase reach of oral self-implemented testing in high-priority communities	Engage population	None	Feasibility	- Improved oral self-test performance - Significant improvement in correct timer uses and result interpretation	Optimal conditions may not reflect real-world outcomes

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Table 4. Summary of HIV prevention interventions for youth in SSA between 2013-2023 (n=19)

Author (Year)	Country	Study Population (Years)	Sample Size	Objectives	Strategies	Model or Framework	Outcomes	Results	Limitations
(Dow et al., 2020) (55)	Tanzania	12-24 YPLHIV	128	To establish the feasibility and acceptability of the SYV intervention	Engage population	None	Feasibility	Promising trends in ART adherence and virologic outcomes	- Selection bias due to recruitment from adolescent HIV clinic - Lack of validated mental health screening tools for the population
(Pettifor et al., 2019) (56)	Tanzania	15-23 AGYW	80	To explore participant experiences with a cash transfer and financial education program	Engage population	Conceptual Framework	Acceptability Feasibility	- Reduced transactional sex - Increased agency and self-esteem among AGYW	- Lack of quantitative data - Social desirability bias
(Lavoie et al., 2023) (57)	Botswana	18-24 AGYW	131	To understand support networks and test feasibility of using social support networks for recruitment	Engage population	Acceptability of Intervention (AIM) Model	Acceptability Feasibility	- High interest in mHealth peer support groups - Feasibility of mHealth interventions	Convenience sample may not be generalizable
(Loutfi et al., 2019) (58)	Botswana	16-29 Females, out-of-school and not in paid work	192	To understand support networks and feasibility of using them for recruitment	Engage population	None	Acceptability	- Preference for female support - Predominant face-to-face communication	- Limited knowledge about the total population - Potential isolation or lack of data

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Table 5. Summary of HIV prevention interventions for youth in SSA between 2013-2023 (n=19)

Author (Year)	Country	Study Population (Years)	Sample Size	Objectives	Strategies	Model or Framework	Outcomes	Results	Limitations
(St Lawrence et al., 2013) (59)	Botswana	13-18 Adolescents	40	To generate socially valid vignettes for skill practice in an intervention adapted from the U. S	Engage population	None	Feasibility	- Misinformation about sex, STIs & HIV - Unprotected sex after substance use - Peer pressure to engage in risky behaviors	Limited qualitative interviews until redundancy was achieved
(Handa et al., 2014) (60)	Kenya	15-25 OVC	1,443	To assess whether Kenya's Cash Transfer for OVC can reduce HIV risk by postponing sexual debut	Engage population	None	Acceptability Feasibility	Reduced odds of sexual debut, especially among females	Social desirability bias due to self-reporting sexual behavior measures
(Koech et al., 2014) (61)	Kenya	10-24 Young people	22,832	To describe demographic and clinical characteristics and loss to follow-up outcomes of HIV+ youth enrolled in care	Engage population	None	Acceptability	High rates of loss to follow-up, especially among older adolescents	- Missing critical data - Potential underestimation of true number of deaths
(Buttolph et al., 2017) (62)	Kenya	15-24 Youth	1,000	To outline a methodology for a gender-specific combination HIV prevention pilot study	Engage population	Social Ecological Framework	Feasibility	Effective age- and gender-specific interventions based on literature review, focus groups, and modeling	Lack of controlled trial design or comparator prevents population-level effectiveness assessment

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Table 6. Summary of HIV prevention interventions for youth in SSA between 2013-2023 (n=19)

Author (Year)	Country	Study Population (Years)	Sample Size	Objectives	Strategies	Model or Framework	Outcomes	Results	Limitations
(Embleton et al., 2019) (63)	Kenya	16-24 Street-Connected Youth (SCY)	24	To adapt an existing evidence-based intervention using a modified ADAPT-ITT model with a young key population	Engage population	ADAPT-ITT Model	Acceptability Feasibility	- High acceptability of combined "Stepping-Stones" and "Creating Futures" programs - Potential for use with vulnerable youth	Likely bias towards positive outcomes due to research team's community connection
(Mia et al., 2019) (64)	Kenya	12-24 Male SCY	116	To describe the acceptability of VMMC in a ten-day retreat SCY	Engage population	None	Acceptability Feasibility	- High acceptability of VMMC - Potential for adaptation in other VMMC-priority countries	- Lack of long-term impact data - Potential data quality issues due to sensitive information disclosure
(Kim et al., 2022) (65)	South Africa	15-24 AGYW	4,399	To investigate participation in a combination HIV-prevention intervention and access to condoms and contraceptives	Engage population	None	Feasibility	Increased access and utilization of condoms and contraceptives	- Inability to establish cause-effect relationships - Low response rates
(Mendelsohn et al., 2018) (66)	South Africa	15-24 Youth	2,235	To evaluate the impact of the DTHF-YC on youth health-seeking behavior	Engage population	DTHF-YC Model	Acceptability Feasibility	- Increased rate of youth HIV testing - Significant impact on male youth	Comparison between DTHF-YC and public clinics not possible due to data limitations

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Table 7. Summary of HIV prevention interventions for youth in SSA between 2013-2023 (n=19)

Author (Year)	Country	Study Population (Years)	Sample Size	Objectives	Strategies	Model or Framework	Outcomes	Results	Limitations
(Maskew et al., 2016) (67)	South Africa	12-20 Adolescents	206	To identify factors potentially associated with poor attendance at clinic visits	Engage population	None	Feasibility	- Barriers centered around clinic logistics - Older adolescents prone to missed visits and virologic failure	Perspectives may not fully represent challenges of adolescents who dropped out of care
(George et al., 2020) (68)	South Africa	12-24 AGYW	18,500	To determine the impact of the DREAMS initiative on HIV incidence among AGYW in four districts in South Africa	Engage population Use evaluative strategies	None	Feasibility	- High HIV incidence among AGYW - DREAMS as a comprehensive response	- Absence of baseline data - Lack of longitudinal data for long-term effectiveness assessment
(Hershow et al., 2015) (69)		12-16 Adolescent Girls	4,260	To evaluate the effectiveness of SBHP programs	Engage population	None	Feasibility	- Improved HIV-related knowledge, attitudes, and communication - Increased HCT uptake among girls	- Difficulty in determining intervention impact due to lack of control group - Lack of long-term follow-up data

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4 DISCUSSION

The findings from our scoping review highlight the diverse approaches required to address HIV prevention and intervention among adolescents and young people in SSA. The significant positive effects of cash transfer programs, adherence interventions, peer support initiatives, and tailored prevention strategies highlight an important point: addressing social determinants and providing comprehensive support are critical to decreasing HIV incidence and improving outcomes for young people living with HIV. Our findings also give valuable insights into the limitations encountered by studies and gaps that remain to be addressed in terms of HIV prevention in young people in SSA.

4.1 Diverse Interventions on HIV-Related Outcomes among Youth in SSA

Cash transfer programs emerged as a significant intervention strategy in addressing HIV-related outcomes among adolescents and young people in SSA. Multiple studies included in our scoping review consistently reported positive impacts, such as improved access to healthcare services, reduced vulnerability to HIV risk factors, and enhanced economic empowerment among program beneficiaries. This evidence is consistent with findings from other studies (70, 71), highlighting the efficacy of cash transfer programs in addressing social determinants of health and reducing HIV incidence rates within vulnerable populations.

Adherence interventions constitute another crucial component in HIV prevention and treatment strategies for young people in SSA. The review revealed evidence supporting the effectiveness of adherence interventions, including counseling, peer support, and reminder systems, in enhancing medication adherence rates, particularly for ART, and achieving viral suppression among young people living with HIV. This assertion is substantiated by studies such as Neilan et al. (72) and Kanters et al. (73), which have demonstrated positive impacts on treatment outcomes and reduced HIV transmission risk.

Peer support initiatives emerged as pivotal mechanisms for promoting engagement, resilience, and empowerment among adolescents and young people affected by HIV. Consistent findings across the reviewed studies underscored the effectiveness of peer support groups, mentorship programs, and community-based interventions in reducing feelings of isolation, stigma, and discrimination, while also improving mental health outcomes and overall quality of life. Additional research (74, 75) corroborates these findings, highlighting the significant role of peer support in HIV prevention and support interventions.

HIV prevention interventions tailored to the unique needs of young people in SSA have demonstrated considerable success in reducing new HIV infections and promoting safer sexual practices. Studies included in the review emphasized the importance of employing a combination of prevention strategies, such as condom distribution, HIV testing, and behavioral interventions, to effectively lower HIV incidence rates among adolescents and young adults. This finding is consistent with research by Arije et al. (76) and Vermund & Hayes (77), further pointing out the efficacy of comprehensive prevention approaches in mitigating HIV transmission risks.

Healthcare interventions and services play a critical role in improving HIV-related outcomes among adolescents and young individuals in SSA. The review highlighted the importance of youth-friendly clinics, community-based testing programs, and integrated healthcare services in enhancing HIV testing, treatment, and care availability. This evidence aligns with studies by Bulstra et al. (78) and Kurth et al. (79), which emphasize the positive impact of healthcare interventions in achieving better health outcomes and reducing HIV transmission rates among young populations.

Training and education programs also emerged as effective strategies for increasing HIV-related knowledge, attitudes, and behaviors among young people in SSA. Utilizing innovative approaches such as mobile technology and peer-led education, these programs empower young people to make informed decisions about their sexual health and seek timely HIV testing and treatment services. This assertion is supported by research by Ezelote et al. (80) and Faust & Yaya (81), highlighting the importance of tailored educational interventions in promoting HIV prevention and care.

Furthermore, our review identified the significant role of social support networks in facilitating access to HIV prevention and care services among vulnerable populations. Leveraging existing social networks and community connections has been shown to enhance engagement in care, reduce stigma, and promote adherence to treatment among adolescents and young people living with HIV. This finding also aligns with research by Bazrafshani et al. (82) and White et al. (83), emphasizing the importance of social support in enhancing HIV-related outcomes within vulnerable populations.

4.2 Gaps to be addressed

However, the findings also highlight several gaps and limitations in the current body of research. Many studies faced issues such as selection bias, response bias, and limited

generalizability due to small sample sizes or specific study settings and lack of long-term follow-up. It is worth noting that the majority of the interventions targeted AGYW. Kanyemba et al. (84) observed that HIV prevention policies and programs often overlook adolescent boys and young men (ABYM). Although their risk of HIV acquisition is lower compared to AGYW, ABYM remain vulnerable due to several factors. These include engaging in frequent sexual activities such as unprotected sex, sexual encounters under the influence of alcohol, and having multiple sexual partners. Additionally, they exhibit poor health-seeking behaviors, evidenced by their lack of seeking treatment for STIs and infrequent HIV testing (84). This trend is also evident among young key populations, including men who have sex with men, young people who inject drugs, female sex workers, and young people in detention. These groups have been left behind in HIV prevention efforts in SSA (29). Future research should thus focus on larger, more diverse populations and incorporate long-term follow-up to better understand the enduring effects of HIV prevention strategies. A study by van den Elshout et al. (85) demonstrated the necessity of long-term follow-up to monitor PrEP efficacy and adapt strategies to maintain high adherence and address any emerging challenges such as side effects or shifts in prevention needs.

Notably, among the 19 articles reviewed, only 3 specifically addressed adolescents, while the remaining 16 targeted both adolescents and young adults. This trend of grouping young people together in interventions is common. Mwale & Muula (44) highlight the importance of tailoring interventions to specific youth age groups for greater impact. For instance, services need to be differentiated for a 12-year-old with perinatally acquired HIV compared to a 24-year-old with sexually acquired HIV. An example is Malawi's “Teen Club,” which provided youth-friendly ART care, individual psychosocial support, peer activities, disclosure assistance, and SRH education, leading to higher retention in care for participants aged 15–19 (86). Hence, it is important to disaggregate HIV-related outcomes by age (e.g., 10-14; 15-19; 20-24) and transmission risk factors to better understand intervention impacts on different patient subgroups and improve program efficacy (86).

The findings indicate a strong emphasis on engaging the target population in HIV prevention activities, which is critical for ensuring that programs are both relevant and successful. The fact that a large number of articles proved acceptability and feasibility suggests that many interventions are both well-received and practical to execute. However, the gap in the number of articles demonstrating acceptability alone versus feasibility alone indicates that while many interventions are well-received, they may not always be acceptable and vice versa.

4.3 Recommendations based on findings

The evidence suggests a paradigm shift toward more holistic and integrative approaches. Cash transfer initiatives, by promoting economic empowerment, help to reduce risk factors and improve healthcare access. Adherence interventions highlight the importance of ongoing support systems, such as counseling and peer groups, in ensuring medication compliance and viral suppression. Peer support activities are especially helpful because they develop resilience, reduce stigma, and improve the mental health of young people living with HIV. Tailored HIV preventive measures, such as condom distribution and behavioral treatments, have demonstrated significant success in reducing new infections. This finding emphasizes the significance of comprehensive prevention strategies. Furthermore, youth-friendly healthcare services and community-based programmes that are age-specific critical to make HIV testing, treatment, and care more accessible and acceptable to young people.

In addition, educational initiatives, particularly those that use mobile technology and peer-led approaches, are also helpful in raising HIV awareness and encouraging safe sexual behaviors, while social support networks help vulnerable populations engage in care, decrease stigma, and adhere to therapy more effectively.

Finally, future HIV prevention initiatives must be designed to have balanced strategies that prioritize acceptability and feasibility. Involving both the target population and stakeholders in the planning and implementation phase can help ensure that interventions are both acceptable and practically achievable.

4.4 Limitations

This scoping review has some limitations that need to be addressed for a more comprehensive understanding of the topic. Firstly, our review included only English-language studies, which might have led to the exclusion of relevant research published in other languages, introducing language bias. Additionally, we relied on published literature which could have caused publication bias, as studies with positive outcomes are more frequently published. Secondly, our geographic focus on five selected countries in SSA limits the generalizability of the findings to other regions within the region. Thirdly, there was considerable variability in the design, quality, sample size, and methodologies of the included studies. This variability may have influenced the results and their interpretation, as some studies included broader age ranges or mixed populations, potentially affecting the specificity of the findings for youth populations. Lastly, the scoping review methodology provided a broad overview of the available literature but did not allow us to do a detailed synthesis of the findings. Some studies also did not provide

detailed information on the implementation and outcomes of the interventions, and so, while the review identified key themes and gaps, it did not offer an in-depth evaluation of the effectiveness and impact of specific interventions.

Despite these limitations, this scoping review provides valuable insights into the current state of HIV prevention and intervention efforts targeting adolescents and young people in SSA. It highlights the need for continued research, tailored interventions, and comprehensive strategies to address the unique vulnerabilities and challenges faced by this population in the fight against HIV.

5 CONCLUSION

Several recommendations emerge for public health practice and research. First and foremost, policymakers, practitioners and researchers should prioritize the development and implementation of HIV prevention and intervention programs that include broader demographic groups such as ABYM and young KPs including MSM, FSW, PWID and young people in detention to ensure that no one is left behind. Second, they should employ integrative and multifaceted approaches to enhance reach and efficacy, as well as create more sustainable and impactful outcomes that are acceptable and practically feasible. Furthermore, incorporating long-term follow-up in program evaluations or research would provide accurate data of vulnerable groups, guiding the design of tailored interventions necessary to cater to at-risk population. Additionally, it is crucial to segment interventions by specific age groups to address the unique needs of different youth sub-groups effectively.

This review highlights the vital need of comprehensive, inclusive, and sustained approaches to HIV prevention and intervention among adolescents and young people in SSA. By addressing the diverse needs and vulnerabilities of this population, we can enhance the efficacy of HIV-related programs and move closer to achieving significant reductions in HIV incidence and improvements in health outcomes. Continued research, innovative strategies, and comprehensive policies are essential in sustaining progress and ensuring that no group is left behind in the fight against HIV.

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APPENDIX

PRISMA-ScR Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	4
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scopingreview approach.	12-13
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	13-14
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	N/A

Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	14
Informatio nsources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	15
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	15
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	15
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated formsor forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	16
Data items	11	List and define all variables for which data weresought and any assumptions and simplificationsmade.	N/A

Critical appraisal of individual sources of evidence §	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis ofresults	13	Describe the methods of handling and summarizing the data that were charted.	16
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	16
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted andprovide the citations.	17-18
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present therelevant data that were charted that relate to the review questions and objectives.	19-23
Synthesis ofresults	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	19-23
DISCUSSION			
Summary ofevidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions	24-27

		and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping reviewprocess.	27
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	28
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	N/A

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

** Where sources of evidence (see second footnote) are compiled from, such as bibliographic databases, socialmedia platforms, and Web sites.*

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g.,quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with information sources (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance beforeusing it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

ABSTRACT IN FRENCH

Introduction : Le VIH reste un problème de santé publique important en Afrique subsaharienne, en particulier chez les jeunes âgés de 15 à 24 ans. Pour y remédier, nous avons réalisé un scoping review axée sur cinq pays prioritaires d'Afrique subsaharienne: Kenya, Tanzanie, Botswana, Eswatini et Afrique du Sud.

Méthodes : Nous avons fait un scoping review avec le protocole du PRISMA-ScR, en nous concentrant sur les études publiées entre janvier 2013 et décembre 2023. Les critères d'éligibilité comprenaient les études portant sur la prévention/le traitement du VIH, impliquant des interventions liées à la santé sexuelle, avec une population d'étude âgée de 15 à 24 ans, et menées au Kenya, en Tanzanie, au Botswana, en Eswatini ou en Afrique du Sud. En outre, les études devaient être rédigées en anglais. Les critères d'exclusion comprenaient les études d'observation, les études n'appartenant pas à la tranche d'âge ou à la zone géographique spécifiée, les études multi-pays impliquant des pays autres que ceux sélectionnés, et les articles rédigés dans une langue autre que l'anglais. Le processus de sélection comprenait l'examen du titre et du résumé, suivi de l'examen du texte intégral.

Résultats : Notre stratégie de recherche a permis d'obtenir 2 494 articles à partir de bases de données et 15 enregistrements supplémentaires à partir de la littérature grise. Après avoir identifié et supprimé 147 enregistrements en double, il restait 2 362 enregistrements uniques. Après sélection des titres et des résumés, 215 enregistrements ont fait l'objet d'une sélection du texte intégral, 196 enregistrements ayant été exclus sur la base des critères d'exclusion. Finalement, 19 études ont répondu à tous les critères d'inclusion et ont été incluses dans la synthèse finale. Les résultats de l'examen ont révélé des impacts positifs sur l'accès aux soins de santé, l'autonomisation économique, les taux d'observance du traitement antirétroviral, les résultats en matière de santé mentale et la réduction des risques de transmission du VIH chez les jeunes.

Conclusion : Cette étude souligne l'importance d'approches globales, durables et à multiples facettes dans les efforts de prévention et d'intervention en matière de VIH. Les recommandations comprennent la priorisation de groupes démographiques plus larges, la segmentation des interventions par groupes d'âge, l'intégration de diverses stratégies, l'incorporation d'un suivi à long terme dans les évaluations et le maintien des efforts de recherche pour répondre aux vulnérabilités uniques des jeunes en Afrique subsaharienne.

Mots-clés: Prévention du VIH, jeunes, Afrique subsaharienne, interventions, revue de détail