WHAT WORKS TO PREVENT HIV AMONG ADOLESCENT GIRLS?

What are the key findings?

Adopting a holistic combination approach that addresses the underlying drivers of the epidemic for adolescent girls will be most effective in preventing HIV. Other outcomes are economic, social and health benefits.

What are the key recommendations?

- Creating an enabling environment through legal reform and promotion of gender equality
- Working at community level, including developing youth-friendly services and preventing GBV
- Keeping girls in secondary schools through education subsidies
- Promoting CSE
Although HIV prevalence has dropped in the region, young people, and particularly young women, are disproportionally affected.

East and Southern Africa is the epicenter of the epidemic.

More than half of the people living with HIV globally live in East and Southern Africa.

AIDS is the leading cause of death among adolescents (aged 10–19) in ESA.

Adolescents (aged 10–19) are the only age group in which AIDS deaths rose between 2001 and 2013.

In 2013, 44 per cent of new infections in adolescents were from six East and Southern African countries (see left).
Adolescent girls (aged 10–19) and young women (aged 15–24) are at increased risk

Globally in 2015, **10.7 million women live with HIV**

More than **236,000 young women (aged 15–24)** were newly infected

As opposed to **115,000 men**

Women acquire HIV infection on average five to seven years earlier than men, and this has a much larger impact on their opportunity to develop skills, assets and resilience.

*In Sub-Saharan Africa:*

7 in 10 new infections among 15- to 19-year-olds are among girls.

Adolescent girls and young women accounted for 25 per cent of the new infections among adults.

In South Africa, adolescent girls are 8 times more likely than their male peers to have HIV.¹

In Mozambique, adolescent girls had an HIV prevalence of 7 per cent, which doubled to 15 per cent by the time they were 25 years of age. In general, there are sharp increases in prevalence rates after the age of 17.²

This clearly shows a failure to protect adolescent girls and young women and meet their sexual and reproductive health needs as they prepare for adulthood. More must be done to prevent them from acquiring the disease.
WHAT MAKES ADOLESCENT GIRLS PARTICULARLY VULNERABLE?

The risks and vulnerabilities that adolescent girls and young women face operate at multiple levels of society and intersect with one another (see Figure 1). Some risk factors are valid for both boys and girls, however young girls face intersecting vulnerabilities of being young and being female. Further, there are key vulnerable sub-populations among adolescent girls such as sexual minorities, girls who inject drugs, youth involved in sex work, and youth who are homeless, have disabilities, are married, orphaned or incarcerated.

Factors that increase adolescent girls’ and young women’s vulnerability to HIV

**SOCIETY**

Punitive or restricted SRH laws and policies which exacerbate structural and community violence against young women/girls and limit girls’ access to services and information; stigma and discrimination as a barrier to accessing health services; gender inequality

**COMMUNITY/GROUP**

Poor quality of, and access to, health/SRH services and education; socio-cultural norms that restrict communication about sex, curtail adolescent sexuality, and limit access to health services

**RELATIONSHIP/HOUSEHOLD**

Gender norms that marginalise and restrict women’s/girls’ autonomy over their own bodies and choices; moving into extended family households; child marriage; violence against women/girls; vulnerability to early, coerced and intergenerational sex

**INDIVIDUAL**

Biomedical factors; behavioural factors; individual characteristics, i.e. age; socio-economic status and limited livelihood opportunities, knowledge and skills; developmental aspects of adolescents, i.e. peer pressure; limited health literacy; fear and experiences of stigma and discrimination which limit adherence
WHAT DOES THE EVIDENCE TELL US?

How was the evidence review conducted?

The literature for this review was sourced through multiple electronic databases and grey literature. It included systematic reviews, reviews, and intervention evaluations of specific HIV/STI interventions conducted in East or Southern Africa, and focused on adolescent girls.4

In total, six systematic reviews were found and summarised (four from Low and Middle Income Countries, including Sub-Saharan Africa and South Africa, published between 2014 and 2015) and 26 additional papers were included. An annex presenting more details about the methodology and a table presenting the details of the studies included in this review are available on http://bit.ly/ESAROHIVBrief.

Gaps in the evidence

• Paucity of evidence on effective interventions in the region.

• Evidence for how adolescents can best access effective interventions targeted at adults is extremely limited. There is a need to develop a safe and enabling framework for participation of adolescents in HIV research.

• Even where studies of interventions for adolescents exist, there is often a lack of sex- and age-disaggregated data.

• Most studies do not include biomarkers of HIV or STIs, making it difficult to conclude effectiveness.

• Evidence from randomised studies is lacking.

• Many studies are short-term and include limited follow-up making it difficult to determine the sustainability of the intervention.

• The possibility of under-reporting of sexual activity and high sexual risk behaviour is pervasive in most studies.

• Evidence suggests that multi-component holistic approaches are likely to be most effective, however such approaches have not been rigorously evaluated.

• Interventions are often not developmentally or theoretically grounded, and research to inform programme implementation is limited.
Summary of the evidence: What works, what are the challenges to implementation and strategies to overcome barriers?

<table>
<thead>
<tr>
<th>Level of effectiveness</th>
<th>Types of interventions</th>
<th>Impact on HIV</th>
<th>Other types of impacts</th>
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</table>
| EFFECTIVE              | Treatment as prevention| Evidence from up to 10 different reviews and studies covering more than 7 countries in Sub-Saharan Africa show that HIV treatment as prevention, in particular, oral and topical PrEP, TRAP, is effective in reducing HIV infection rates and the spread of HIV among young women.5, 6, 7 | • Increased VCT  
• Improved knowledge and attitudes  
• Decrease in risky sexual behaviour  
• Autonomous decision-making |
| PROMISING (STRONG EVIDENCE) | In-school HIV prevention education | Only 3 evaluations reviewed measured HIV biological outcomes specifically, and they did not yet demonstrate impact on HIV incidence. However, these interventions have resulted in positive changes in behaviour and in gender norms which will likely lead to HIV reduction.12 | • Improved adolescent-parent communication (as a result of homework focused on parent-child discussions)  
• Improved knowledge and attitudes, self-efficacy in condom use  
• Decrease in risky sexual behaviour, in unprotected sex  
• Delayed sexual transition |
| PROMISING (LIMITED EVIDENCE) | Education subsidies or cash transfers to improve educational attainment | All of the 8 reviews show that cash transfer schemes or education subsidies are positive and promising HIV-prevention programmes, with a positive impact on behavioural change and increases in educational attainment. However, biological markers were not measured in most evaluations.19 | • Reduction in HIV-risk behaviour18  
• Reduced STIs15  
• Reduction in school drop-out  
• Reduction in child marriage  
• Increase in years of schooling completed  
• Improved health-related quality of life  
• Improved socio-economic status and food security |
### Challenges/barriers to implementation and to scale up

- PreP has so far only been tested in trial conditions with young women in the region and not “in real life conditions” at scale⁸
- Low level of testing for young people and young girls in particular, in part because of restrictive ethico-legal frameworks
- Health-care workers’ attitudes and health facilities’ youth-friendliness may hamper access
- Uncertainty and ambivalence among young people to taking anti-retrovirals for prevention; concern about side-effects of drugs; HIV stigma associated with pill-taking
- Young women may not be able to exercise as much agency in accessing PrEP as men or couples⁹
- As treatments must be taken for life, the cost of using treatment for prevention outweighs primary prevention and will be difficult to sustain

- Focus is on single topics, such as sexuality education without simultaneously addressing other risk factors
- Lack of tailoring to youth developmental stage and needs
- Teacher discomfort with discussing sex
- Packed curriculum that limits prioritisation of health education
- Parental fears that sexuality education will increase sexual risk-taking
- Limited capacity/training opportunities for teachers to enable them to conduct age-appropriate, participatory sexuality education
- Student stigma and discrimination against HIV-positive adolescents
- Sexual abuse by some teachers

- Careful consideration of cost-effectiveness and sustainability is required before these can be recommended for scale-up²⁰
- There may be other barriers to girls’ school attendance (such as gender inequality, systems of cultural beliefs and legal factors) that must also be addressed as a key strategy for intervention scale-up
- These interventions are likely only to be effective in places where there are significant barriers to school attendance

### Recommended strategies

- Strengthen youth-friendly services
- Interventions must include focus on stigma and discrimination against HIV-positive adolescents
- Mobile phone technology has provided some opportunities to engage with young women, to provide reminders to administer their antiretrovirals, and also to provide ongoing support for engagement in the trial¹⁰
- Biomedical prevention interventions should be paired with behavioural and structural interventions for greater effectiveness and outreach¹¹

- Delivery by trained adult facilitators, multiple-session programmes, curricula that include skills and knowledge building activities are associated with better outcomes¹³
- Intervening with adolescents before they are sexually active
- Curricula must be age-appropriate and should stress equitable gender norms, identify what constitutes coercive relationships and consensual sex, and strengthen agency⁴
- Efforts should concentrate on keeping girls in secondary school as this has more potential to decrease fertility rates and HIV infection¹⁶
- Interventions need to be combined with other interventions, including accessible and youth-friendly health services, including mental health
- Tackling stigma and discrimination must be incorporated into interventions
- Abstinence-only, as well as peer-led interventions, tend to be ineffective and should be avoided²⁰

- Overall, keeping girls in school appears to reduce risk. Therefore, waiving of school fees or other forms of education subsidies (such as uniforms, textbooks, school supplies) should be brought to scale²¹
- Combining interventions designed to keep adolescent girls in school longer with other HIV-prevention interventions (including psychosocial support and HIV education or CSE in school) as part of a multi-pronged combination HIV-prevention strategy²²
- In general, smaller payments made more frequently and closer to the behaviour being observed were more effective than the promise of larger payments in the future²³
- Combining cash transfer schemes with increased care and support services was found to be most effective at reducing HIV-risk behaviour and changing social norms²⁴
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| Promoting gender-equitable norms and addressing gender-based violence | HIV reduction was observed in one programme that addresses GBV. Although HIV reductions were not found in the other five reviews, they each indicated an improvement in HIV testing, treatment and care, and HIV knowledge and attitudes, which likely lead to reductions in HIV rates. | • Improved gender attitudes and norms  
• Decreased social acceptability of violence  
• Decreased rates of IPV  
• More supportive community responses to victims  
• Reduced risk-taking behaviour  
• Increased condom use and self-efficacy  
• Reduced risk of transactional sex |
| Making health services more adolescent friendly | Evidence from five reviews indicate that ARVs, HIV treatment, provision of clean injecting equipment and oral pre-exposure prophylaxis have all shown effectiveness in reducing HIV in adults, but have not been evaluated for adolescents specifically. | • Help girls know their HIV status and increase protective behaviours  
• Increase number of adolescent girls accessing HTC  
• Comprehensive harm reduction programmes can reduce HIV risk behaviours |
| Out-of-school HIV prevention education         | Out-of-school HIV prevention education was assessed in only four reviews and most evidence is not from ESA. Reduction in HSV2 in one intervention (Stepping Stones in South Africa) was seen, although the other three showed no biological measurement. | • Improved knowledge, attitudes, self-efficiency in condom use, and risky behaviour  
• Increased self-efficacy for safer sex |
| Community mobilisation programmes             | Five reviews looked at this type of programme: one intervention showed lower HIV incidence rate (while it was being implemented, but not after the intervention conclusion). Evidence is lacking in behavioural and biomedical indicators for social outcomes. | • Increased self and partner disclosure of HIV  
• Reduction in partner violence  
• Improved gender attitudes |
| Awareness raising and mass media              | No reported impact on HIV when an awareness raising and mass media intervention is implemented on its own (based on 2 reviews). | • Increased positive attitudes towards condoms  
• Interventions targeted at adults were promising in increasing uptake of HIV testing (but only measured for adults) |
### Challenges/barriers to implementation and to scale up

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<th>Challenges/Barriers</th>
<th>Recommended Strategies</th>
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<tr>
<td>• NGO led interventions can be limited in duration and scope due to lack of government involvement and sustainable systems</td>
<td>• Programmes should start early in childhood and continue during the formative period of adolescence and aim to break the multi-generational cycle of abuse</td>
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<td>• A lack of community participation in identifying and framing the problem/developing relevant interventions</td>
<td>• Changing gender norms on a national scale would require adapting programmes and combining them with structural interventions, relationship level interventions, community mobilisation, ‘whole-of-school’ interventions’ and microfinance combined with gender-transformative approaches. The existing intervention models, designed for women all ages, need to pay special attention to the needs of young girls. Changing gender norms requires working with boys and girls, both separately and together.</td>
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<tr>
<td>• Governments overlooking the needs of adolescents for services – most HTC services remain unavailable to adolescent, unmarried women</td>
<td>• Condom use and health protective mechanisms should be promoted prior to the earliest age that adolescents tend to initiate sex</td>
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<tr>
<td>• Adolescents needing parental permission accessing contraception and HTC (^{20})</td>
<td>• HTC services need to be provided/integrated with other health services (^ {21})</td>
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<td>• Adolescents are reluctant to take medications for fear of stigma or discrimination</td>
<td>• Youth-friendly health services, including health workers‘ training and outreach strategies for girls (^ {22})</td>
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<td>• Limited uptake of HTC among young girls</td>
<td>• More gender and age specific interventions are needed (younger females are influenced by cultural norms which make practising safer sex more difficult) (^ {24})</td>
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<td>• Failure to reach most vulnerable populations, such as street children and out-of-school youth</td>
<td>• Special attention is required to reach vulnerable adolescents through offering different delivery modalities, improving the school environment, and providing support for adolescents with mental health and academic problems (^ {25})</td>
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<td>• Structural barriers, such as transport and competing responsibilities, prevent some girls from attending programmes</td>
<td>• Interventions to reduce both IPV and HIV prevalence and that have strategies addressed to both sexes show promise (^ {27})</td>
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<td>• Often led by NGOs and limited in duration and scope as well as poor monitoring and evaluation</td>
<td>• Communities alone cannot make positive changes to HIV incidence, therefore community mobilisation interventions should occur alongside powerful stakeholders and structural change (^ {28})</td>
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<td>• Many interventions fail to engage with the broader context and power relations that structure health in disadvantaged communities</td>
<td>• This intervention requires several years of concentrated effort</td>
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<td>• Parents/other adults not directly involved in intervention increased their health/HIV related knowledge but were not engaged in transformative change</td>
<td>• The use of multiple media channels, such as a combination of television, radio and print material, allows reaching a wider audience</td>
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<td>• To be most effective awareness-raising or use of mass media should begin at sexual debut and be combined with group sessions, along with skills training and provision of condoms (^ {29})</td>
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<td>• New technologies, such as mobile communication, social media and mobile health products, should be tested as innovative new platforms for delivering interventions relevant for adolescents (^ {40})</td>
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<td>• Internet based programs are not accessible to many remote communities or schools</td>
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The evidence conclusively shows that adopting a holistic approach that addresses the underlying drivers of the epidemic for adolescent girls will not only be most effective in preventing HIV, but will have numerous other economic, social and health benefits. Reducing individual risk is not enough and efforts need to be made to address societal factors that increase vulnerability to HIV.

**CONCLUSIONS**

*Through a comprehensive approach we can prevent the spread of HIV among adolescent girls*

The evidence conclusively shows that adopting a holistic approach that addresses the underlying drivers of the epidemic for adolescent girls will not only be most effective in preventing HIV, but will have numerous other economic, social and health benefits. Reducing individual risk is not enough and efforts need to be made to address societal factors that increase vulnerability to HIV.

**Guiding principles for a combination approach:**

- Be tailored to adolescents according to age, gender, and socio-demographic factors
- Address the intersectionality of adolescent risk identities (homeless youth and drug abusing adolescents; orphaned and involved in sex work)
- Include a strategic combination of structural, biomedical and behavioural approaches
- Be grounded in developmental and life course frameworks
- Actively involve adolescent girls in the design and implementation with a focus on empowerment
- Have a clear theory of change - understanding the underlying mechanisms of risk/vulnerability and how the intervention components target these underlying mechanisms
- Respond to the broader structural drivers of HIV, such as poverty and gender inequality
- Operate on a coordinated and consistent basis over time, on the multiple levels that reinforce or challenge risk behaviour
- Include rigorous implementation and monitoring and evaluation strategies from the onset
Combination approach for HIV prevention among adolescent girls

Strategies/interventions recommended, based on the evidence of what works and on the strategies to overcome the implementation barriers

SOCIETY: CREATE AN ENABLING ENVIRONMENT
- Awareness raising and communications campaigns to change social norms
- Legal reform to allow adolescents to be HIV tested, access contraception and HTC services, or participate in treatment prevention activities
- Promoting gender equality
- Laws to protect women from violence

COMMUNITY/GROUP
- Community mobilisation programmes
- Stigma reduction programs
- Training health workers and other front-line service providers
- Building capacities of SRHR services to facilitate access to prevention treatment and care services
- Preventing gender-based violence and child marriage and promoting girls’ empowerment

RELATIONSHIP/HOUSEHOLD
- Providing education subsidies to keep girls in secondary school
- Improving communication between adults/parents and adolescents
- Promoting gender-equitable norms and addressing violence against women

INDIVIDUAL
- In-school HIV prevention education
- Out-of-school HIV prevention education
- Comprehensive sexuality education
- Providing education subsidies or conditional cash transfers to increase educational attainment
- Treatment as prevention – HIV testing, ARVs, PrEP and TRAP
- Biomedical interventions to reduce exposure, transmission, infection
- Accessible mental health services for adolescents