

HIV risk and violence against women and girls

TECHNICAL BRIEF
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Authors: Lori Heise, Tara Beattie, Sinéad Delany Moretlwe, Annie Holmes, Katherine Fritz, Maggie Bryce, Charlotte Watts

What have we learned?

Violence is key to women and girls' vulnerability to HIV. Evidence reveals multiple pathways – biological, behavioural and structural – linking violence against women and girls (VAWG) with increased risk of HIV infection. Moreover, VAWG is a barrier to effective uptake of HIV prevention and treatment. However, it is possible to reduce violence and improve related HIV outcomes within programmatic timeframes. Addressing VAWG can achieve multiple health and development outcomes – for example, by improving maternal health care and enrolment in school – in addition to enhancing HIV prevention and care. A new costing mechanism developed by STRIVE offers a way for different sectors to share the costs of interventions that deliver multiple benefits – an approach in line with the Sustainable Development Goals (SDGs).

What is the issue?

HIV and violence constitute twin and often interconnected epidemics.¹ Growing evidence shows that many forms of intimate partner violence (IPV) – physical, sexual and psychological – increase susceptibility to HIV and disease progression in women and girls.² Violence and trauma can lead to lower CD4 counts, higher viral loads and lower adherence to HIV prevention and treatment drugs.³

TERMINOLOGY

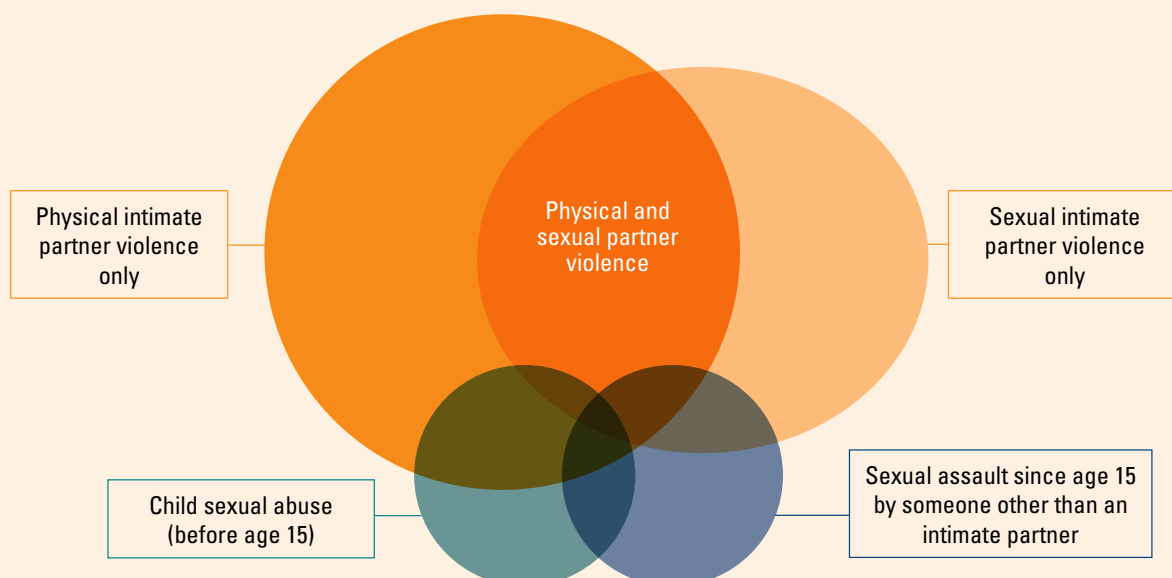
We use the term violence against women and girls (VAWG) as the most inclusive of ages and types of violence. However, programmes and studies use a range of other terms. Much of the literature and evidence focuses specifically on intimate partner violence (IPV) while some studies investigate 'gender-based violence (GBV)'.

One in three women worldwide will experience physical or sexual violence in her lifetime, with IPV the most common form of VAWG globally. Importantly, the prevalence of IPV varies enormously between and within countries, districts and localities.

Like IPV, HIV is also concentrated in hotspots. In Eastern and Southern Africa, HIV is the leading cause of death in girls and young women aged between 15 and 19, with 7 in 10 new infections occurring in 15–19-year-old girls.⁴

As co-occurring global epidemics, with similar root causes of gender and economic inequalities,⁵ VAWG and HIV both constitute urgent public health priorities. Addressing violence against women and girls, especially by intimate partners, is a key human rights issue as well as being essential to achieving the UNAIDS 90-90-90 treatment targets by 2020 and to ending the HIV epidemic by 2030.⁶

Figure 1: Intimate partner violence (IPV) is the most common form of VAWG globally



Adapted from Heise L, et al; WHO Multi-country Study on Women's Health and Domestic Violence against Women, 2005.

A woman revealing her HIV status faces an increased risk of violence from her intimate partner and, conversely, IPV is associated with an increased risk of HIV infection, as a systematic review and meta-analysis confirms.⁷ At least three prospective studies confirm an association between IPV and incident HIV, with the strongest data emerging from South Africa.⁸ Findings from cross-sectional studies on a link between IPV and HIV are conflicting, but a 2015 meta-analysis finds an association between biologically confirmed HIV and IPV in 12 Demographic Health Surveys (DHS) from sub-Saharan Africa.⁹

Women who experience IPV are not only at higher risk of acquiring HIV, they are also less likely to access healthcare services. A systematic review found that IPV is associated with lower antiretroviral therapy use and adherence, as well as lower odds of viral load suppression,¹⁰ while a qualitative study identified challenges faced by women who have experienced IPV in adhering to medication and accessing health services.¹¹

IPV and HIV share many common features:

- Both are endemic at high levels in many parts of the world, and especially in East and Southern Africa.
- Both are spatially distributed, with 'hotspots' and pockets of high and low exposure sometimes scattered in close proximity.
- Both disproportionately affect *young women*, especially in sub-Saharan Africa.
- Both share common 'upstream' factors – such as insecure livelihoods, alcohol availability and rigid gender norms – that drive downstream risk of HIV infection and partner violence.

Women who provide sexual services are at the greatest risk of experiencing violence. As well as experiencing violence by an intimate partner, a systematic review found that, globally, between 45% to 75% of women who sell sex have experienced workplace violence.¹²

1 Message 1: Multiple pathways link VAWG and HIV

How, precisely, is VAWG associated with HIV risk? The possible pathways of influence (see Figure 2) are manifold and complex.

At the population level, several structural factors drive both HIV risk and intimate partner violence. These include: poverty and economic stress, gender inequality, social norms that condone violence, and social constructions of masculinity and femininity. These shared structural drivers influence the behavioural and biological pathways between IPV and HIV.

Many have assumed that the most significant pathway is through sexual violence, or forced sex, which causes genital trauma and a resulting immune response. However, limited evidence exists for this pathway. Individual women can become infected through rape but, with rare exception, studies do not confirm an association between forced sex and HIV. One explanation is that most forced sex takes place within on-going relationships and therefore repeated exposure to an HIV positive partner probably influences HIV risk more than any added risk from genital trauma. In conflict settings, sexual violence perpetrated by combatants may not be the main risk of violence or of any concomitant HIV transmission. Prevalence of household and intimate partner violence is often high in conflict, disaster and humanitarian contexts.²²

More important perhaps than genital trauma, are the mental trauma and stress caused by violence. New evidence suggests that physical and emotional abuse of women may affect their general immune response, making them more susceptible to infection.¹³ If violence is associated with immune activation in the genital tract, which in turn is known to be associated with increased risk of HIV acquisition,¹⁴ then this may be an important yet relatively unexplored factor that is driving risk.

Among women living with HIV, IPV and HIV are linked through fear and control. Fear of violence reduces women's willingness to test for HIV, and increases the length of time it takes for them to access care; current intimate partner violence is linked to poor ART adherence; and gender based violence is associated with poor HIV outcomes.¹⁵

In addition to these direct pathways, violence in childhood, especially sexual abuse, may constitute an indirect pathway. Childhood violence is known to create a cascade of physical, psychological and behavioural responses that can place individuals at increased risk of sexually transmitted infections including HIV. Men who were exposed to sexual abuse or witnessed violence as children are more likely themselves to perpetrate violence.¹⁶

A crucial factor is the HIV status of a woman's sexual partners. It is now clear that men and boys who abuse women and girls are themselves more likely to be HIV positive, which in turn increases risk of HIV acquisition among their partners.¹⁷ Men who are violent are also more likely to engage in a range of risk behaviours, including having outside sexual partners, abusing alcohol and other substances, engaging in anal sex and paying for sex. Not surprisingly, these men are also more likely to report symptoms of STIs¹⁸ and be diagnosed with STIs,¹⁹ including HIV.²⁰ This clustering of risk behaviours among men is one of the most important pathways linking IPV and HIV in women.

This suggests that HIV programmes should focus both on risky behaviour among men and on upstream structural factors that link both to IPV and HIV:

- gender inequality and gender norms condoning male dominance and female subordination
- binge drinking and availability of alcohol
- insecure livelihoods
- acceptability of violence in relationships

STRIVE contribution

Measuring intimate partner violence

As for many other structural factors, standardised measures are essential if we are to compare evidence across studies. For this reason, STRIVE compiled a technical measurement brief²¹ to guide researchers (experts and non-experts) on how to collect valid quantitative data on partner violence in an ethically and methodologically sound manner. The brief addresses:

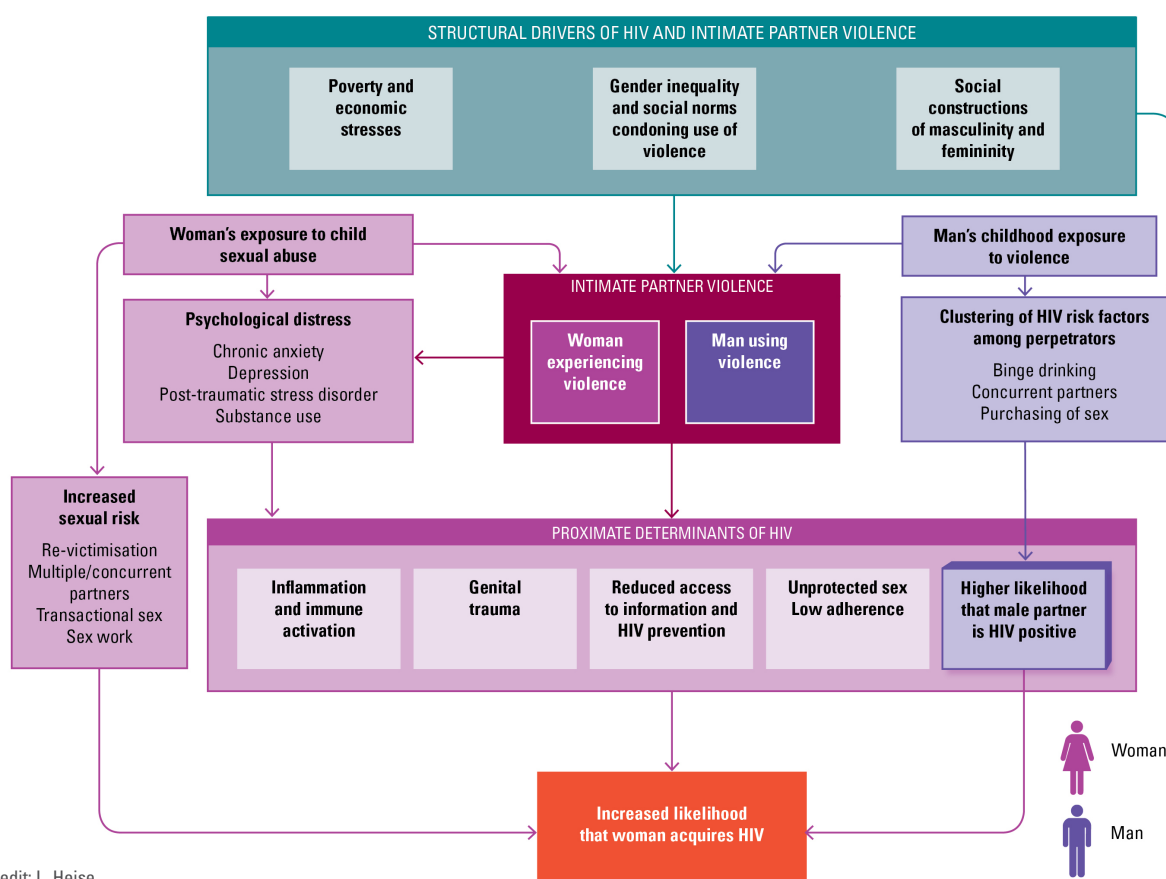
- definitions
- ethical and safety obligations (informed consent, privacy)
- methods for increasing disclosure among research participants
- minimum items necessary for measuring intimate partner violence
- defining IPV as an outcome or exposure variable

Greentree II

To understand the connections and relative importance of different pathways linking VAWG and HIV – biological, behavioural, structural – STRIVE assembled a high level multi-disciplinary gathering, Greentree II, in 2015. Uniquely, this meeting brought together experts in both molecular immunology and structural drivers of violence and HIV, resulting in a novel synthesis of wide-ranging evidence – from adolescent girls’ biological susceptibility, to structural conditions such as gender inequality, to behavioural factors such as binge drinking – summarised in a report.²² Overall, we noted:

- Violence is a manifestation of the structural social and economic inequalities between men and women, at the same time further exacerbating these inequalities.
- The health and social effects of violence against women and girls are cumulative and long-term. Adolescents and young women are especially at risk, due to a combination of enhanced biological susceptibility to HIV acquisition and developmental vulnerabilities.
- The HIV epidemic in sub-Saharan Africa cannot be brought under control without reducing HIV acquisition among adolescent girls and young women, the most rapidly expanding demographic group in the region. Given the association between violence and HIV acquisition in young women, addressing violence against women and girls is critical to curbing the HIV epidemic overall.

Figure 2: Potential pathways between intimate partner violence and women’s acquisition of HIV



Credit: L. Heise

2 Message 2: It is possible to reduce VAWG and improve HIV outcomes

Many see IPV in particular as an intractable problem, but programmes and interventions have been shown to be effective in reducing violence, improving HIV outcomes and benefiting other areas of women’s health and social wellbeing such as education, livelihood opportunities and mental health. Several proven models, including community-based programmes, have been evaluated with rigorous cluster randomised trials.

Interventions that have focused on gender issues and healthy relationships have improved the distribution of female condoms and post-exposure prophylaxis²³ as well as resulting in fewer HIV risk-taking behaviours. Examples include the REAL Fathers’ Initiative²⁴ (Northern Uganda), Stepping Stones Trial²⁵ (South Africa) and the SwaKoteka Trial with One Man Can campaign (South Africa). Economic interventions have become a central approach to preventing IPV and HIV; a comprehensive review of cash transfers and economic strengthening interventions, some integrating gender transformative elements, found mixed results.²⁶ Examples of successful interventions follow.

IMAGE

A cluster randomised controlled trial (the Intervention with Microfinance for AIDS & Gender Equity) in rural South Africa combined a group-based

microfinance intervention with a participatory gender and HIV training curriculum for loan participants. The evaluation showed that, over a two-year period, levels of physical and/or sexual partner violence experienced by participants in the past year were reduced by 55%.²⁷

SHARE

The Safe Homes And Respect for Everyone (SHARE) Project, implemented from 2005 to 2009, mobilised communities to change norms around IPV and offered integrated violence and HIV prevention programming, addressing IPV in the context of HIV testing and counselling. A cluster-randomised trial, the study found reductions both in reported experience of IPV and in HIV incidence.²⁸

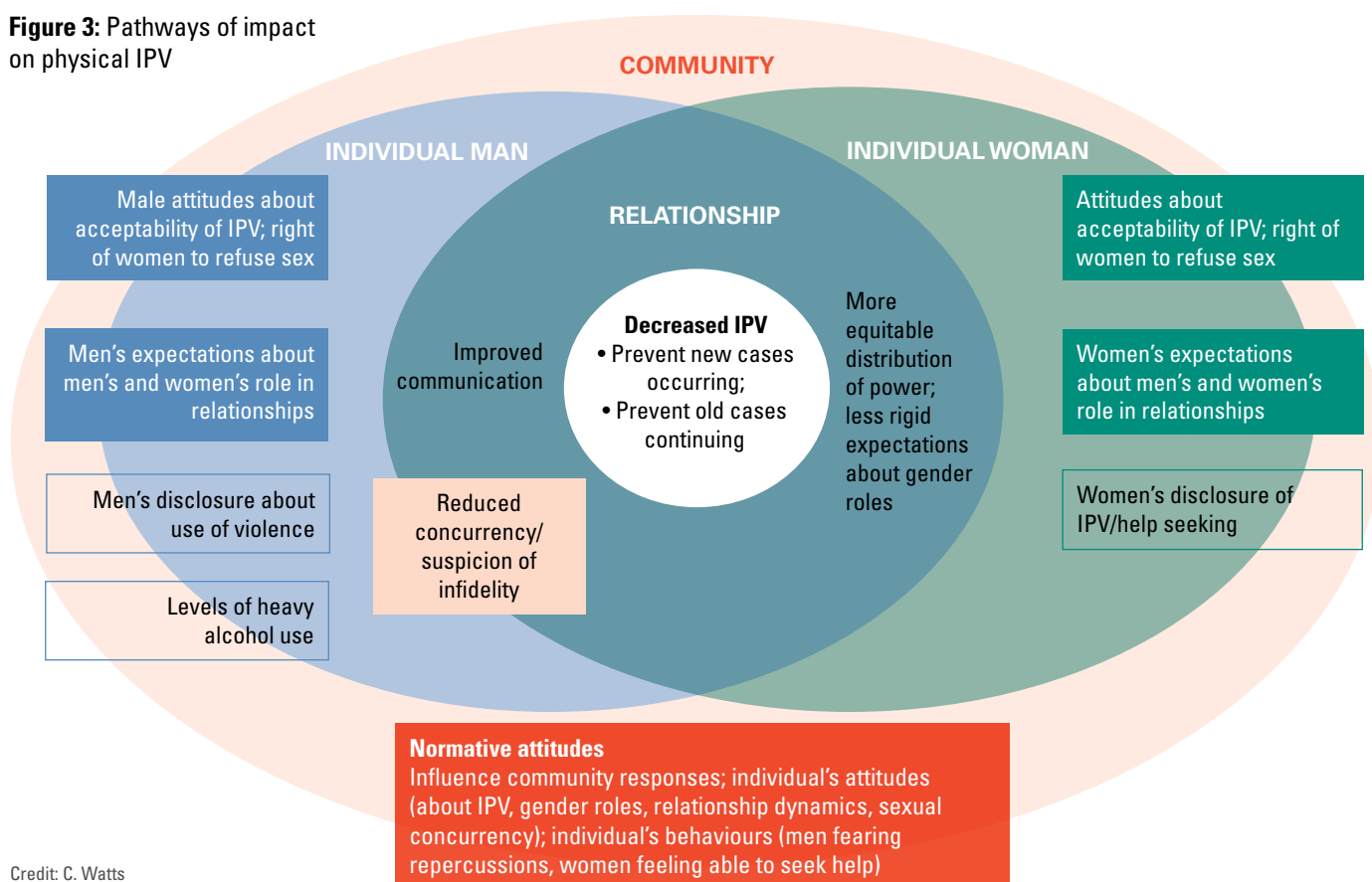
STRIVE findings

The consortium participated in analysis of a cluster randomised trial that was already underway in Uganda (SASA!) and conducted a full intervention study in Tanzania (MAISHA). Both had impact on the levels of IPV and on the norms that sustain it.

SASA!

This comprehensive approach, designed and implemented in Kampala, combined tools and a systematic process for community mobilisation to prevent violence against women and HIV and to address gender inequality as a structural driver of HIV. The SASA! study, a cluster randomised controlled trial, assessed the programme’s impact

Figure 3: Pathways of impact on physical IPV



on violence and HIV prevention in terms of attitudes towards gender roles and norms, levels of IPV, HIV risk behaviours and community responses to violence against women. The study found positive results in:

- a reduction in support for wife beating
- a reduction in past year occurrence of physical violence among women with a history of experiencing violence
- reduced numbers of concurrent partners among men
- an increase in women's ability to refuse sex

MAISHA

The MAISHA intervention in Mwanza, Tanzania was designed to follow a ten-session participatory curriculum in gender awareness in order to empower women, prevent IPV and promote healthy relationships. One group of participants were members of microfinance clubs, another group were not. At baseline, the study identified high rates of physical and/or sexual IPV, with women experiencing different forms of violence including controlling behaviour, emotional abuse and economic abuse.

The intervention reduced the risk of physical and/or sexual IPV by a quarter over a two-year period. The effect was strongest for physical IPV, which was reduced by one-third, while impact on sexual IPV was limited. The impact of the MAISHA intervention was greater among women who attended seven or more of the ten sessions. Attitudes towards violence and norms around male authority shifted among women who received the intervention. This included a reduction in the number of women who expressed attitudes accepting of IPV. In-depth interviews with a small sub-set of the women who received the intervention revealed increased self-confidence because of new skills in communication and conflict resolution.

Samvedana Plus

An intervention and evaluation study in rural North Karnataka, India, Samvedana Plus was the first attempt to address violence against sex workers by their intimate partners. Although findings were inconclusive, the trial highlights the specific challenges of addressing IPV in the context of sex work. Further research is needed on IPV prevention among sex workers, who are at the highest risk of violence and HIV globally.

3 Message 3: Addressing VAWG upstream achieves multiple health and development outcomes

By addressing upstream risk factors such as VAWG, we have the potential to achieve multiple health and development outcomes. In our research and analysis, STRIVE has looked for opportunities to realise co-benefits, multiply impacts and achieve 'development synergies'. This type of system thinking – an antidote to vertical and disease-specific HIV strategies – aligns with the 2030 Agenda for Sustainable Development, where the Sustainable Development Goals (SDGs) view economic, social and environmental targets as indivisible and interdependent.

Achieving the SDGs is an ambitious and hugely expensive undertaking. The ultimate challenge is to encourage co-financing of select 'best buys' that deliver multiple benefits across many different goals. We believe that insights gained from STRIVE research can be usefully applied to this challenge.

STRIVE contribution

Justifying VAWG prevention

Preventing all forms of VAWG in both public and private spaces appears as Target 2 under Goal 5: gender equality. From the HIV perspective, preventing VAWG intersects with Target 3 (ending HIV among other epidemics by 2030) within Goal 3:

Good Health and Wellbeing. According to STRIVE analysis, prevention of VAWG is also enabling of or indivisible from a number of other SDG targets (see Table 1).

Paying for VAWG prevention

A structural intervention seldom appears cost-effective in terms of single-benefit analyses, for example by the measure of HIV benefit alone. If each of a number of benefits is costed, however, and if each sector contributes according to the benefit it will gain, such an intervention is feasible. STRIVE developed a co-financing mechanism that provides a method for calculating multi-sectoral, multi-benefit cost-effectiveness, as the basis for new joined-up thinking about resourcing programmes.²⁹

UNAIDS' investment framework³⁰ classified structural interventions as "critical enablers" rather than basic services. Two models (Goals and Optima HIV) are used worldwide to inform HIV programming and resource allocation, in particular funding by the Global Fund to national governments. On the basis of immediate endpoints, and how they are currently measured and modelled, structural interventions cannot compete with other HIV interventions. In 2016, STRIVE in collaboration with the Global Fund and the HIV Modelling Consortium convened an expert consultation to boost efforts to incorporate structural factors and interventions into modelling design and analyses,³¹ building on the concept of co-financing and new evidence on the necessity of tackling structural drivers of HIV risk.

Table 1: SDG goals and targets that have a synergistic relationship with violence against women (Goal 5, Target 2)

	GOAL 2: ZERO HUNGER	GOAL 3: GOOD HEALTH AND WELL-BEING	GOAL 4: QUALITY EDUCATION	GOAL 5: GENDER EQUALITY
	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Ensure healthy lives and promote well-being for all at all ages	Ensure inclusive and equitable quality education and promote lifelong learning opportunities	Achieve gender equality and empower all women and girls
TARGETS	<p>2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons</p>	<p>3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</p> <p>3.2: By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</p> <p>3.3: By 2030, end the epidemics of AIDS, TB, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</p> <p>3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</p> <p>3.5: Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol</p> <p>3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</p>	<p>4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</p> <p>4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</p> <p>4.3: By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</p> <p>4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</p>	<p>5.1: End all forms of discrimination against all women and girls everywhere</p> <p>5.2: Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation</p> <p>5.3: Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation</p> <p>5.6: Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences</p> <p>5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws</p> <p>5.b: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women</p>

	GOAL 8: DECENT WORK AND ECONOMIC GROWTH	GOAL 10: REDUCED INEQUALITIES	GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES	GOAL 16: PEACE, JUSTICE AND STRONG INSTITUTIONS
	Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all	Reduce inequality within and among countries	Make cities and human settlements inclusive, safe resilient and sustainable	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
TARGETS	8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	16.1: Significantly reduce all forms of violence and related death rates everywhere 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children

What impact have we had?

STRIVE's work on HIV and VAWG has achieved considerable attention. The Greentree II meeting forged new connections across sectors, disciplines and thinking that are not easy to quantify. Exchange and analysis at that meeting have also played a significant part in seeding new directions in research. An example within the STRIVE consortium is the EMPOWER study in South Africa and Tanzania, which asked: "Is it feasible, acceptable and safe to integrate responses to gender-based violence and harmful norms into an HIV prevention programme offering pre-exposure prophylaxis to adolescent girls and

young women aged 16–24 years?" Implemented in areas with high levels of both HIV and violence (Hillbrow in Johannesburg, and Mwanza town on Lake Victoria), EMPOWER represents the kind of combination prevention that responds to the real lives and challenges of young women. Beyond the consortium itself, STRIVE researchers are extending this integrated approach in new directions. An example is Maisha Fiti, a new three-year MRC/DFID funded study with 1,000 women who sell sex in Nairobi, Kenya, to examine the associations between violence against women, mental health concerns, alcohol and drug use, biological changes to the immune system and HIV.

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STRIVE RESOURCES

- **Greentree II: Violence against Women and Girls, and HIV**, <http://strive.lshtm.ac.uk/resources/greentree-ii-violence-against-women-and-girls-and-hiv>
- **Maisha: Microfinance and gender training to reduce violence against women**, <http://strive.lshtm.ac.uk/projects/maisha-microfinance-and-gender-training-reduce-violence-against-women>
- **SASA! Act now against violence**, <http://strive.lshtm.ac.uk/projects/sasa-act-now-against-violence>
- **Samvedana Plus: Reducing violence and increasing condom use in the intimate partnerships of female sex workers**, <http://strive.lshtm.ac.uk/projects/samvedana-plus-reducing-violence-and-increasing-condom-use-intimate-partnerships-female-sex>
- **EMPOWER: Combination HIV prevention intervention for adolescent girls and young women**, <http://strive.lshtm.ac.uk/projects/empower-study-evaluation-combination-hiv-prevention-intervention-adolescent-girls-and-young>

More information: <http://strive.lshtm.ac.uk/partner-violence>

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STRIVE research consortium

A DFID-funded research programme consortium, STRIVE is led by the London School of Hygiene & Tropical Medicine, with six key research partners in Tanzania, South Africa, India and the USA. STRIVE provides new insights and evidence into how different structural factors – including gender inequality and violence, poor livelihood options, stigma, and heavy alcohol use – influence HIV vulnerability and undermine the effectiveness of the HIV response.

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