

Prioritising combination HIV prevention for adolescent girls and young women in South Africa

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SUMMARY

Adolescent girls and young women in southern Africa and particularly South Africa currently constitute the population most vulnerable to HIV infection. Many social factors contribute to this risk, among them widespread gender inequalities and the high prevalence of intimate partner and other forms of violence. Oral pre-exposure prophylaxis (PrEP) offers an effective new HIV prevention tool that women could potentially control. WHO has recommended PrEP as part of a combination HIV prevention package for people at substantial risk of HIV infection, and this provides a new opportunity to put HIV prevention in the hands of young women themselves. It also provides an opportunity to consider how best to respond to those structural factors that may ultimately influence the success of a biomedical HIV prevention method.

Wits RHI, as a STRIVE partner and a participant in several PrEP trials, has leveraged its unique position and knowledge of both structural and biomedical HIV prevention interventions to influence and shape the national combination prevention programme for girls and young women in South Africa ('She Conquers'), which includes increasing access to PrEP.



Still from a video about the study: EMPOWER club

What is the issue?

The elevated HIV risk of adolescent girls and young women (AGYW) in southern Africa is an urgent challenge in itself, but it also threatens to undermine efforts to stem the tide of the epidemic in this region.

- Globally, nearly two million adolescents aged 10–19 were living with HIV in 2015, and by 2030, new HIV infections among adolescents are projected to rise by nearly 60 percent.
- Despite progress in some areas – for example, in expanding access to antiretrovirals and investing in male circumcision – a rapidly increasing youth population in the region will mean an increase in the overall number of adolescents living with HIV. This, according to UNAIDS, is the only demographic group in which mortality has not decreased.
- In sub-Saharan Africa, girls accounted for three out of every four new HIV infections among adolescents aged 15–19, and young women acquire HIV infection at least 5–7 years earlier than men.¹
- Few available HIV prevention options are under the direct control of AGYW, and in many settings, social stigma makes it challenging for them to openly use them at all.

PrEP with antiretrovirals could significantly benefit those at risk of HIV infection when used as part of combination prevention. However, like antiretrovirals for treatment (ART), PrEP is unlikely to have a population-level impact if we do not simultaneously address the structural factors that shape HIV risk and HIV treatment outcomes.

Chief among these factors are gender inequality and gender-based violence (GBV), which are significantly associated with an increased risk of HIV acquisition for women in southern and eastern Africa.^{2,3} In sub-Saharan Africa as a whole, the first sexual experience for girls is often coerced, and the younger the age of sexual debut, the more likely it is to be forced.^{4,5} Research is now showing that GBV – and intimate partner violence (IPV) in particular – influence uptake and sustained use of biomedical HIV treatment and prevention strategies.^{6–10} In research trials of

candidate HIV prevention technologies such as vaginal microbicide gels, fear of stigma and violence made women reluctant to disclose trial participation and gel use to their partners and attempts to conceal gel use led to further relationship strain.¹¹ Young women's vulnerability to IPV appears to be deepened by their economic dependence on male partners, an association that social protection programmes can potentially disrupt: the Swa Koteka conditional cash transfer project in South Africa, which targeted poor girls in secondary school, reduced their risk of physical IPV in the previous 12 months by 34%.¹²

When it comes to new HIV technologies, IPV makes it difficult for young women to incorporate these into their lives and achieve the consistent and high levels of use required for effective HIV prevention. Low adherence is precisely what researchers now believe lay behind the disappointing results of the recent FACTS 001 trial, which assessed tenofovir gel as HIV prevention for AGYW and included one of the youngest HIV prevention cohorts to date.^{10,13} While the requisite levels of gel use were not achieved in the trial, nevertheless the intervention made some headway towards identifying concrete ways to support adherence in young women at risk.^{11,14} This took the form of empowerment clubs, which proved acceptable and helpful to trial participants and – within the context of PrEP delivery – clearly hold potential to prevent both HIV and GBV.

Empowerment clubs were subsequently incorporated into the EMPOWER study, which was developed through a collaboration between Wits RHI and STRIVE partners, and following extensive stakeholder consultations with young women and local communities. Largely funded by the DFID-funded, Evidence for HIV Prevention in Southern Africa (EHPSA), EMPOWER explores whether a package of integrated interventions can support women to incorporate oral PrEP use into their relationships and daily lives. Crucially, the study combines biomedical interventions (PrEP) with behavioural and structural interventions (counselling and testing, stigma reduction and screening for gender-based violence).

Insights from the EMPOWER study, among others in Wits RHI's portfolio, illustrate how introducing PrEP among young women presents both a challenge and an opportunity to:

- identify women at greatest risk of non-adherence to the method
- equip them with skills to introduce and consistently use PrEP in their relationships
- support women's empowerment
- reduce their risk of IPV and stigma
- provide effective referral

Impact

STRIVE research implemented by Wits RHI – detailed in Table 1 – has contributed to South Africa's prioritising of combination HIV prevention for adolescent girls and young women. This contribution unfolded on numerous levels but only really took shape following repeated strategic interactions with local policymakers and implementers. Wits RHI engaged with government partners at regional, national and international levels, encouraging STRIVE research uptake and highlighting the need for a combination approach to HIV prevention for AGYW.

How did Wits RHI achieve impact?

The key elements behind Wits RHI's impact can be summarised as:

1. commitment to the health of those in the immediate geographical area (Hillbrow, Johannesburg)
2. cross-cutting synthesis of evidence ('joined-up thinking') to inform combination prevention
3. reputation and advisory role

Wits RHI offices are located in Hillbrow, a high-density, low-income area of urban Johannesburg. Much of the institute's research has focused on the health needs of local populations in this inner-city neighbourhood.¹² In their efforts to address the deep vulnerability to HIV faced by AGYW here and in the region more broadly, over the years Wits RHI has extended its focus from the clinical trials that initially established its reputation, to include other elements of combination prevention grounded in social science research.

Joining the STRIVE network gave Wits RHI the opportunity to engage with researchers who have experience with interventions that address 'upstream factors' – including the structural barriers that have made effective HIV prevention elusive for young women in Hillbrow and, indeed, in the rest of the country. The inter-disciplinary sharing of ideas and methodologies has enabled the institute to cross boundaries between fields and sectors that were traditionally separate. Wits RHI drew on this experience to refine its thinking and develop practical and effective HIV interventions for local populations. Sinead Delany-Moretlwe, a Research Director at Wits RHI and key STRIVE collaborator, reflects:

"Wits RHI has long acknowledged that the broader socio-economic context of South Africans' lives impacts their risk of HIV, their reproductive health needs and their access and uptake of health services. Over 20 years we have worked to address these issues, and being a part of the STRIVE consortium has deepened our theoretical understanding of the conceptual frameworks and complex pathways of how these factors intersect and influence lives."

In translating these insights into impact on the ground, Wits RHI researchers collaborated with and offered technical support to the South African health ministry. At the same time they were mindful of their own advocacy role in this context. Their engagement with policy issues, in other words, became more deliberate. Wits RHI leveraged its local and international credibility as a trusted biomedical science institute to directly motivate for government to adopt interventions that would tackle the more structural drivers of HIV. It took on active roles in the South African National AIDS Council (SANAC), in regional UNAIDS consultations on HIV prevention and at the Greentree II meeting in New York on HIV and violence against women and girls.

A seminal moment in this process was also Wits RHI's contribution to the South African AIDS Conference in 2015, and presentation of a plenary session ('A Tale of Two Epidemics') – which subsequently became a STRIVE webinar. This presentation convincingly demonstrated why national HIV programmes in the southern African region could no longer ignore the overwhelming evidence that GBV increases young women's HIV risk and impacts on the continuum of HIV prevention, treatment and care.

FROM RESEARCH TO NATIONAL PROGRAMMES: 'SHE CONQUERS'

Launched in 2016 by the National Department of Health, the multi-sectoral programme aims to decrease new HIV infections among girls and young women as well as teenage pregnancies, sexual and gender-based violence, and school dropout rates. It also seeks to build economic opportunities among girls and young women, and overall, targets its work in the 51 most affected sub-districts in South Africa. Wits RHI was a key advisor on this campaign, and provided ongoing technical support in its design and roll-out.

In late 2015, policymakers in the South African health ministry began to conceptualise a national programme – eventually to be titled 'She Conquers: HIV Prevention in Girls and Young Women in South Africa' – with Wits RHI acting as a key partner to help bring these issues to the forefront of their planning. Wits RHI initiated and then co-chaired a sub-group within the government's Technical Working Group (TWG) on PrEP and young women. In quarterly

Table 1: Studies

Authors and title	Published	Overview
Fiona Scorgie et al From fear to resilience: adolescents' experiences of violence in inner-city Johannesburg, South Africa	<i>BMC Public Health</i> 2017 17(Suppl 3):4349 Urban Health at the Edge: A Series on Reproductive Health and HIV in Inner-City Johannesburg https://bmcpublihealth.biomedcentral.com/articles/supplements/volume-17-supplement-3	The daily violence common in poor urban settings in South Africa has lasting effects on physical and mental health. This qualitative study documented the forms of interpersonal violence experienced by adolescents living in Hillbrow: how these experiences differed by gender, how adolescents conceptualise 'dangerous' and 'safe' spaces in their neighbourhood, and what gaps exist in available services for youth in Hillbrow.
Mphatso Kamndaya et al Intersections between polyvictimisation and mental health among adolescents in five urban disadvantaged settings: the role of gender	<i>BMC Public Health</i> 2017 17 (Suppl 3):4348 Urban Health at the Edge: A Series on Reproductive Health and HIV in Inner-City Johannesburg https://bmcpublihealth.biomedcentral.com/articles/supplements/volume-17-supplement-3	Polyvictimisation (PV) – exposure to violence across multiple contexts – causes considerable morbidity and mortality among adolescents. The findings demonstrated that PV is common among both sexes in urban disadvantaged settings across the world, and that it is associated with poor mental health in girls, and with poor health in both girls and boys.
Matthew Quaife et al Preferences for ARV-based HIV prevention methods among adult men and women, adolescent girls and female sex workers in Gauteng Province, South Africa: A protocol for a discrete choice experiment	<i>BMJ Open</i> http://bmjopen.bmj.com/content/6/6/e010682.full	Antiretroviral (ARV)-based prevention is clinically effective but will users choose these methods? This protocol describes a discrete choice experiment (DCE) of preferences for oral pre-exposure prophylaxis; a vaginal microbicide gel; a long-acting vaginal ring; a SILCS diaphragm used in concert with gel; and a long-acting ARV-based injectable. The study seeks to establish which products will be preferred by whom; the cost-effectiveness of single and multi-purpose products; how new products might affect condom use; and how these products might affect the economics of sex work.

Authors and title	Published	Overview
<p>Pettifor, A et al The effect of a conditional cash transfer on HIV incidence in young women in rural South Africa (HPTN 068): a phase 3, randomised controlled trial</p>	<p><i>Lancet Global Health.</i> 2016;4(12):e978-e988 https://www.ncbi.nlm.nih.gov/pubmed/27815148</p>	<p>HPTN 068 assessed the impact of a conditional cash transfer on HIV acquisition among young women in rural South Africa (April 2011 to March 2015). In the intervention arm, young women and their parent/guardian received a monthly cash transfer conditional on 80% school attendance. Overall, 2,328 young women were HIV uninfected at baseline and had at least one follow-up visit. Young women receiving the cash transfer were less likely to experience intimate partner violence (IPV), to have had a sex partner in the past 12 months, or to have had unprotected sex in the past 3 months. Overall, school attendance was associated with reduced risk of HIV acquisition.</p>
<p>Sinead Delany-Moretlwe A tale of two epidemics: Why should violence prevention form an essential part of an HIV prevention response for young women?</p>	<p>Invited plenary at SA AIDS Presented in June 2015 http://strive.lshtm.ac.uk/resources/tale-two-epidemics-sin%C3%A9ad-delany-moretlwe</p>	<p>Gender-based violence (GBV) increases HIV risk, which in turn has marked impact on the continuum of HIV prevention, treatment and care. Dr Sinéad Delany-Moretlwe adapted her plenary presentation from the South African AIDS Conference (Durban) for a STRIVE learning lab webinar. In addition to her own work on adolescent girls' HIV risk and resilience, Dr Delany-Moretlwe synthesised discussions from STRIVE's high-level consultation on violence against women and girls and HIV, Greentree II.</p>
<p>Jonathan Stadler et al Adherence and the Lie in a HIV Prevention Clinical Trial</p>	<p>http://www.tandfonline.com/doi/full/10.1080/01459740.2015.1116528</p>	<p>A PrEP trial for African women in South Africa produced biological evidence of widespread lying about product adherence. This led to public debate that tended to judge the women's motivations as selfish. This article attempted to understand the meaning of "the lie" from the perspective of women trial participants. Seeing the trial as representing a hopeful future, and perfect adherence as sustaining their investment in this, participants recited scripted accounts of adherence and performed the role of the perfect adherer, while identifying other participants as dishonest. Clinical trials create moral orders; here, women embraced the apparatus of the clinical trial to assert their moral subjectivities.</p>
<p>Jonathan Stadler et al (2014) Hidden Harms: Women's narratives of intimate partner violence in a Microbicide trial South Africa</p>	<p><i>Social Science and Medicine</i> http://www.sciencedirect.com/science/article/pii/S0277953614001907</p>	<p>More than a third of women participants in a biomedical trial (microbicides as HIV prevention) reported experiences of intimate partner violence (IPV). Half of these instances were directly related to the women's involvement in the trial. Solutions such as individual and couples counseling and social and legal referral could impact the ethical conduct of clinical trials and the future of female-controlled technologies to prevent HIV.</p>
<p>Delany-Moretlwe et al (2015) Providing comprehensive health services for young key populations: needs, barriers and gaps</p>	<p><i>Journal of the International AIDS Society</i> http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4344539/</p>	<p>In addition to interventions for the prevention, treatment and care of HIV, young key populations (YKP) require other, non-HIV-related health services to meet their significant health and development needs as adolescents. Evaluating optimal approaches for the delivery of a comprehensive package of care of YKP should be a priority.</p>

meetings held with government partners, senior researchers from the institute were invited to present 'lessons learned' from demonstration projects providing PrEP to young women. They repeatedly presented data from clinical trials and structural and behavioural interventions to ground and argue for the importance of tackling the socio-structural barriers to keeping girls and young women HIV-free.

In short, Wits RHI presented a coherent narrative at every opportunity – a narrative that moved structural issues to the centre of efforts to ameliorate young women's HIV risk. When clinical trial data made it increasingly clear that oral PrEP could be an effective and feasible prevention method for young women, the groundwork to link PrEP to underlying structural issues and recognise the need for a combination approach had already been laid. Sinead Delany-Moretlwe explains how this process has unfolded from her perspective:

"Literally in the past six months, I personally have been involved in multiple national, regional and global consultations on this topic and it has been fascinating to see how anticipating this focus and building the narrative around combination prevention has given us a platform in these discussions ... It is clear that being prepared, being a trusted partner and leveraging networks of influence has been important to being part of the conversation."

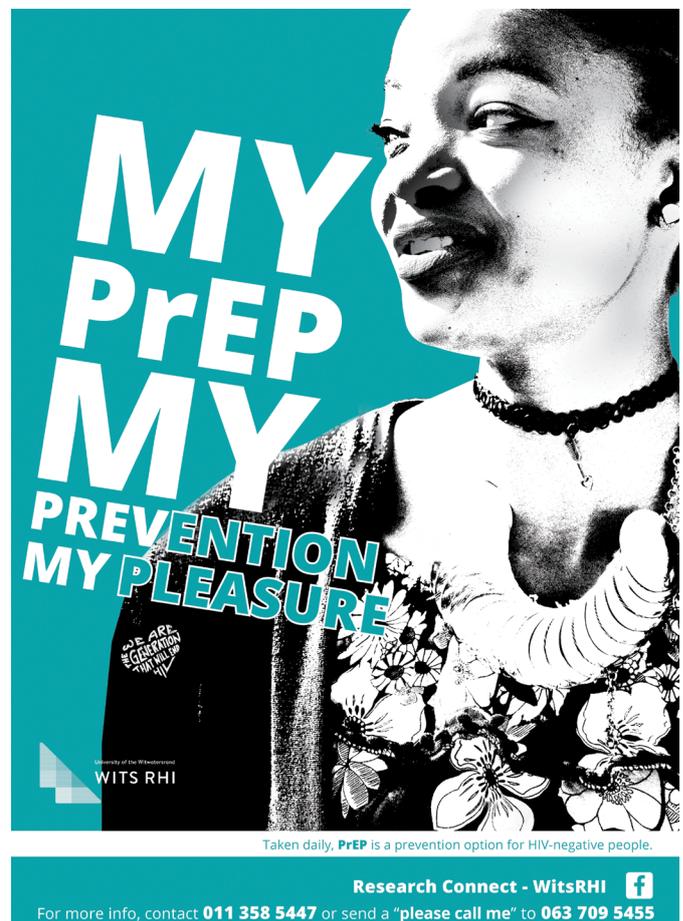
Wits RHI researchers began to notice how, gradually, the focus at national level was shifting away from blaming young women for their 'failure' to adhere to HIV prevention methods in trials, and away from the populist fear and conservative belief that HIV prevention would render young women more 'irresponsible' and 'promiscuous'. Instead, the idea took root that it was not only legitimate to deliver HIV prevention technologies to meet women's 'needs' and their 'wants' but also deeply necessary.

Policy impact was therefore achieved through an iterative contribution to global and regional conferences, as well as an active presence at key meetings and engagement with government policymaking structures. An ongoing sharing of research findings was folded into these interactions, which cumulatively contributed to shifting national policy on HIV prevention for young women.

By tracking closely on the effectiveness of interventions in meeting real-life prevention needs of AGYW, Wits RHI is able to design research that addresses urgent questions facing public health in South Africa. By serving on a variety of technical groups – in academia and policymaking – Wits RHI is able to ensure that their findings achieve impact.

Conclusion

In the complex field of HIV prevention, it is seldom possible to identify a straightforward causal connection in which policy outcomes can be traced back to discrete, measurable events, and where policy shifts follow a linear model. Instead, policy influence is often about networks, inter-personal connections and strategic lobbying. Credible organisations and research institutes who are trusted by government are well-placed to leverage their academic credibility, shift debates and introduce innovative interventions. This was the institutional background that made it possible for Wits RHI to play an intermediary role between science and government, delivering STRIVE research findings directly into the sphere of policymaking. In this way, it helped establish combination prevention for adolescent girls and young women firmly at the centre of the South African government's approach.



Poster promoting EMPower study at Wits RHI.

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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 problematic alcohol use – influence HIV vulnerability and undermine the effectiveness of the HIV response.

