



THE MZANTSI WAKHO STUDY

The missing link in HIV prevention: How “cash plus care” can reduce HIV transmission among adolescents in Southern Africa



INTRODUCTION

This study aimed to understand the lived experience of adolescents living with HIV, focusing on factors that shape the risk of onward HIV transmission, and those that protect adolescents from that risk. The study is based in the Amathole district of the Eastern Cape province, South Africa.

It was implemented by a team of four lead investigators from the Department of Social Policy and Intervention University of Oxford and the AIDS and Society Research Unit, University of Cape Town in partnership with the South African Departments of Health, Social Policy and Basic Education, UNICEF, and local NGOs.

WHY THIS STUDY IS IMPORTANT

Before this study, evidence to inform policy and programming on promoting adherence to antiretroviral therapy (ART) and improving uptake of sexual health among adolescents was very limited, particularly in Southern Africa. Most research had been conducted at healthcare facilities, but the Mzantsi Wakho study traced adolescents to homes, schools and communities, conducting interviews and observations and facilitating participatory research in adolescents' homes.

The Mzantsi Wakho study is the world's largest longitudinal, community-traced cohort of adherence to ART and sexual health practices among HIV-positive adolescents. It combines qualitative and quantitative methods and provides unique insights into prospects for preventing onward transmission of HIV, or positive prevention, in the region.

APPROACH

From 2015, based on data gathered at 53 health facilities, the study recruited 1,060 HIV-positive adolescents (10-19 years) and traced them to their homes in urban, peri-urban and rural areas. A large number (467) of HIV-negative adolescents in the same neighbourhoods were also interviewed.

Over the research period, the study conducted three waves of quantitative surveys, recruiting 90% of the eligible sample at baseline and retaining 94% of baseline participants at both consecutive interviews. Continual qualitative research was conducted with adolescents, friends, caregivers, teachers, healthcare and social service providers. Methods included interviews, observations and an array of participatory exercises.

KEY FINDINGS

The Mzantsi Wakho study has provided a wealth of insights into the lived experience of adolescents living with HIV, much of which has been published and is available online at: <http://www.mzantsiwakho.org.za/publications>. A podcast series on Mzantsi Wakho is available at: <http://www.mzantsiwakho.org.za/news/mzantsi-wakho-podcast-episode-01>

This evidence brief summarises key findings that relate to the risk of onward HIV transmission and the challenges of positive prevention.



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1. Risk of onward transmission

An analysis of the clinic records and interviews with 990 study participants has shown that the majority have high viral loads despite supposedly taking ART, which means that they are at risk of infecting sexual partners. Less than one-third of participants were engaged in high-risk sexual activity. However, just under one-fifth of participants had both high viral loads and practiced high-risk sex, being more likely to transmit HIV to sexual partners.

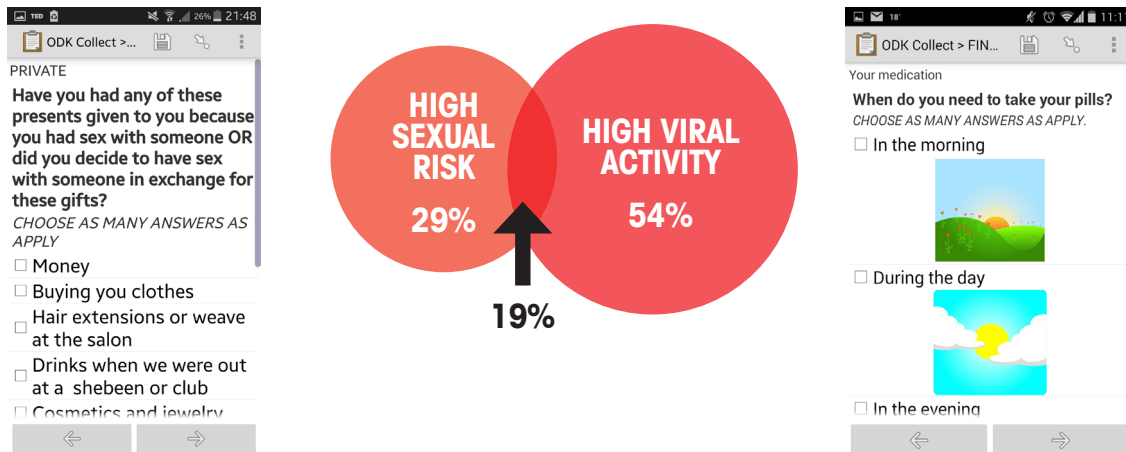


FIGURE 1: HIV transmission risk of 990 study participants

High viral loads are primarily caused by poor adherence to antiretroviral treatment (ART). The study has shown that poor adherence is influenced by structural and psychosocial factors that shape high-risk sexual activity.

Much of the study analysis is devoted to understanding the root causes of high viral load and high sexual risk among participants.

2. ART adherence and retention

Only 56% of participants demonstrated full ART adherence and clinic attendance at baseline, and an analysis of 863 clinic records found that 58.8% had undetectable viral loads, meaning that they were unlikely to pass on the virus. The study also explored factors that were associated with non-adherence, using novel participatory methods to explore the experiential components of medicines-taking from adolescents' perspectives.

2.1 Experience of violence

Participants commonly experienced four types of violence in their daily lives—physical abuse by caregivers, witnessing domestic violence, teacher violence and verbal victimisation by healthcare staff. The study demonstrated that these were associated with non-adherence to ART, and that non-adherence increased with the number of kinds of violence experienced. Non-adherence in the past week rose from 25% for those not exposed to violence, to 73.5% among adolescents exposed to all four types of violence.

2.2 Social protection factors that reduce non-adherence

The study explored the influence of ten different kinds of social protection on self-reported non-adherence. Three kinds of social protection were found to be significantly associated with ART adherence: participation in support groups, food security and good monitoring (supervision) by either caregiver. The study found that the presence of these factors combined strongly to reduce the probability of non-adherence.



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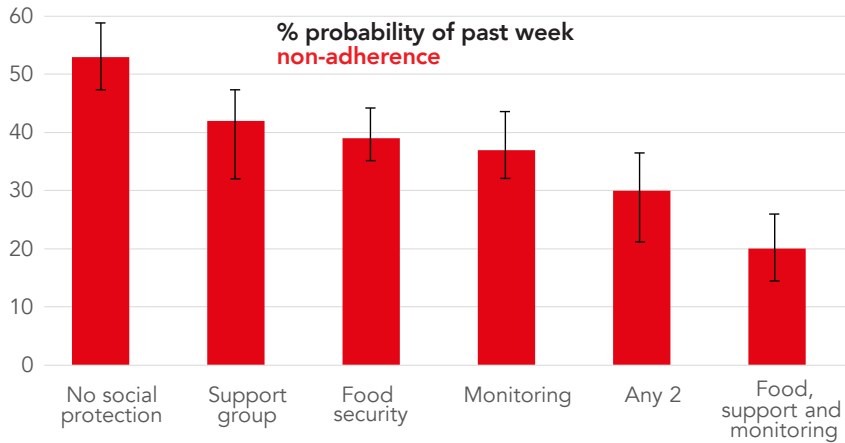


FIGURE 2: Social protection reduces non-adherence

2.3 Clinic factors that increase retention in care

The study focused on features of clinic care that were most associated with participants being retained in care. It found five factors to be most strongly associated with improved retention in care: clinic well **stocked** with ARVs; staff with sufficient **time** to see adolescents; having someone to **accompany** them to the clinic; having enough **cash** to get to the clinic; and **kind** staff. Combinations of these five interventions significantly affected retention in care: with access to none, only 3% of adolescents were retained in care, whereas those who accessed all five reported a 70% probability of being retained in care. Qualitative research on stock-outs of essential medicines revealed dynamic strategies used by healthcare providers to mitigate treatment interruptions, demonstrating significant latent capacity within the health sector.

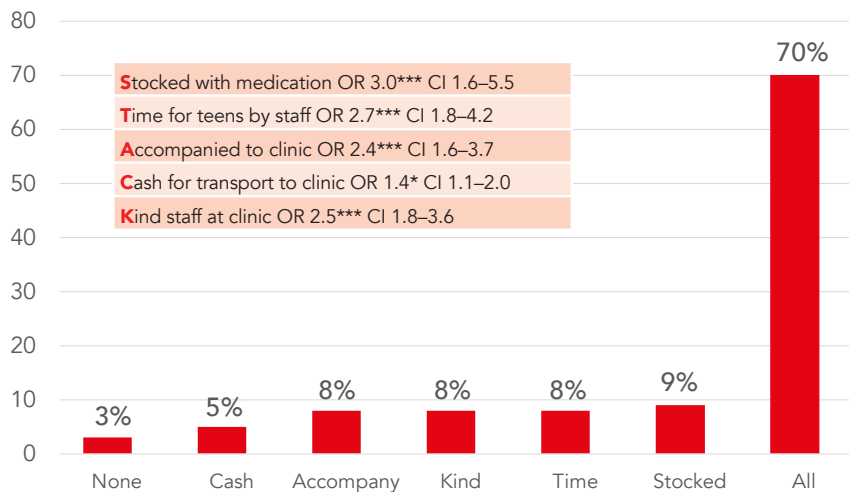


FIGURE 3: Clinic factors influencing retention in care



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3. High risk sexual activity

Participants in the study reported similar rates of unprotected sex to HIV-negative peers. The study explored a range of factors associated with high HIV transmission risk. These included HIV-related factors, such as knowledge of HIV status; psychosocial factors, such as relationship dynamics; and social protection factors.

3.1 HIV-related and relationship factors influence transmission risk

- **Knowledge of HIV status:** The analysis suggested that knowledge of one's own HIV status was strongly associated with safe sexual practices, while knowledge of partner status is associated with reduced safe sex.
- **Mode of infection:** Participants who had been sexually (horizontally) infected were more likely to practice risky sex than those who were perinatally infected (vertical infection).
- **Nature of relationships:** Participants in "safe" relationships were at much lower risk of transmitting HIV to a partner than participants in poor relationships where they found it difficult to take ARVs or negotiate safer sex.

3.2 Social protection factors that reduce unprotected sex

The study found that the probability of participants practicing unprotected sex was lower if adolescents reported three key social protection factors: good parental monitoring (supervision); access to school; and adolescent-sensitive care at the clinic. This was much more pronounced for girls than for boys. Combining these factors had a strong additive effect: only 9% of girls who benefited from all three factors reported unprotected sex, compared with 49% of girls who experienced none of these benefits.

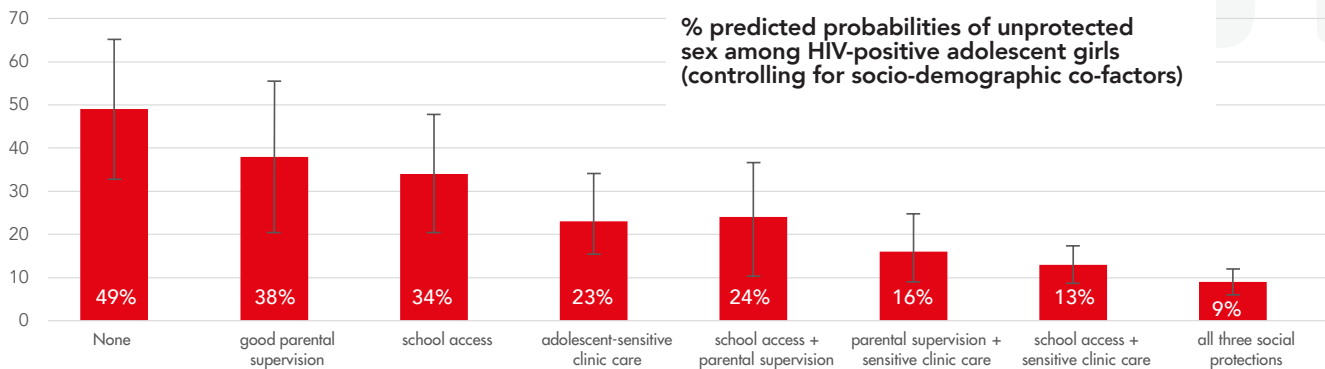


FIGURE 4: Social protection reduces risky sex

CONCLUSION

The Mzantsi Wakho study illustrates the combinations of factors that influence onward transmission of HIV among a cohort of HIV-positive adolescents. In summary: access to support groups, food security, and strong parental supervision were associated with improved ART adherence; while access to free school, adolescent-sensitive clinic care, and strong parental supervision were associated with safe sexual practices. Combinations of these interventions had considerable additive effects, especially in reducing sexual risk-taking among HIV-positive adolescent girls. Most importantly, the study demonstrated the central contribution of adolescent-sensitive clinic services in reducing the risk of onward transmission of HIV.

These findings offer promising evidence to inform combination prevention programmes for adolescents living with HIV in the region, thus reducing both onward transmission of HIV and adolescent AIDS death.



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