What is Maisha Fiti?
A three-year study with 1,000 women in Nairobi, Kenya, Maisha Fiti examines the associations between violence against women, mental health concerns, alcohol and drug use, biological changes to the immune system and HIV. How are these factors interconnected in the complicated and difficult lives of women who sell sex?

Maisha Fiti is innovative because it addresses associations across different levels that are generally studied separately:

- **Biological** factors (genital tract inflammation and immunological changes)
- **Behavioural** factors (drug and alcohol use, mental health HIV prevention and treatment adherence)
- **Structural** factors (poverty, violence)

In Swahili, “maisha fiti” means “quality life”. What we learn from the Maisha Fiti study will help in designing more effective ways to prevent and treat HIV infection as well as addressing violence against sex workers, common mental health disorders and alcohol and drug addictions.

Why are we conducting this research?
Two-thirds of the estimated 37 million people living with HIV/AIDS reside in sub-Saharan Africa, where women and girls are more likely to be infected than men and boys. [1,2] Women who sell sex face a particularly high risk of infection. [3] The need to reduce HIV risk is urgent.

From existing evidence, we know that:
- men who are violent to women are more likely to have HIV [4]
- violence is common for women who sell sex [5]
- violence is causally associated with depression and with alcohol use [6,7]
- alcohol addiction, depression and post-traumatic stress disorder (PTSD) are associated with increased inflammation in the blood [8,9]
- genital inflammation is causally linked with increased risk of catching HIV as HIV infects immune cells in the genital tract [10]
- it is likely that violence, alcohol and substance use and/or mental health may make it more difficult for a woman to adhere to HIV treatment [10,11] but there is limited data on this from sub-Saharan Africa

The Maisha Fiti study investigates if violence against women and girls causes immunological changes in their blood and genital tract, which increases their risk of catching HIV if they have sex with an HIV-positive man.

It also explores if violence interferes with a woman’s ability to start and adhere to her ARV medicines.

Figure 1: Violence and HIV Conceptual Framework
Inflammation of the female genital tract is causally associated with HIV acquisition, but the cause of genital inflammation is often unclear and behavioural risk factors have not been investigated. At the level of physiology and immunology, we can understand how violence experience and heavy alcohol use may increase HIV acquisition risk by increasing genital inflammation, perhaps through a mental health pathway, but there have been no epidemiological studies to investigate this.

Among women who sell sex and who are living with HIV, structural and behavioural factors such as violence experience and alcohol addiction could impact on uptake and adherence to antiretroviral (ARV) HIV treatment, leading to more rapid disease progression and emergence of ARV drug-resistant strains. However there is a paucity of studies with women who sell sex that have investigated this.

Maisha Fiti aims to work out how these biological, behavioural and structural factors fit together, filling important gaps in the evidence. The findings will inform efforts to protect women from violence and from HIV, and to better support women living with HIV to adhere to treatment.

Where is the study taking place?
The Maisha Fiti study is taking place in Nairobi, Kenya where around 30,000 women sell sex across the city. Most women solicit clients and have sex in venues, specifically bars with and without lodges (rooms which can be rented for sex work). Most sex workers are single with children, and around 20% are living with HIV. Violence is common: a recent survey in Nairobi found 24% of women reported experiencing violence in the past six months and more than half (56%) of sex workers had been arrested in the past 6 months (NASCOP 2017). In addition, virtually all sex workers (97%) use alcohol. Programme data from sex work clinics suggests that approximately 45% of women who sell sex have problematic alcohol drinking. There is no data yet on mental health disorders (such as depression, anxiety, post-traumatic stress disorder). As violence and alcohol rates are high, this research is important for this population.

What does the research consist of?
A longitudinal, mixed-method study, Maisha Fiti involves 1,000 women who sell sex in Nairobi. Researchers interview the women at two time-points, six months apart. Two work packages run concurrently:

1. To identify the behavioural and biological risk factors for genital inflammation, Maisha Fiti conducts a longitudinal, mixed-method study with 750 HIV-uninfected women, and examines all known and potential risk factors for genital inflammation, as well as potential confounders.

2. To understand the impact of structural and behavioral risk factors - particular to populations of women who sell sex - on HIV ARV uptake and adherence, Maisha Fiti conducts a longitudinal, mixed-method study with 250 HIV-infected women.

For both work packages, we use qualitative research in order to understand women’s interpretation and experience of violence, mental health, alcohol and substance use, as well as how these factors inter-relate with HIV risk behaviours. Selected to represent different ages and types of sex work, 40 women from the wider group take part in two qualitative interviews, close to baseline and six months later. They provide life stories, detailing sex work initiation, sex work and experiences of violence by different perpetrators (partners, police, clients) and across different environments (domestic, community, workplace). Analysis of these interviews and life stories will clarify the conceptual framework and pathways.

All aspects of the research respect the women’s anonymity and confidentiality.
What will we know by the end of this study?
• The prevalence, severity and type of violence exposure, mental health morbidity and genital inflammation among women who sell sex in Nairobi.
• Women’s perceptions and experiences of violence and mental health morbidity and how these inter-relate with alcohol and substance use, sexual risk behaviours and HIV drug use.
• How ARV adherence by women who sell sex changes over time, including the impact of violence exposure, drug and alcohol use, and other social factors, on ARV uptake and adherence.

What will the research findings contribute?
The findings from Maisha Fiti will contribute to the design of interventions to address the women’s multiple needs. Possible elements to complement existing HIV prevention and treatment services may include:

• targeted clinical components (such as anti-inflammatories; HIV Pre-exposure Prophylaxis (PreP); HIV Post-exposure Prophylaxis (PEP); violence screening and treatment / referral; depression screening and counselling)
• behavioural components (such as de-addiction counselling and harm reduction; strategies to reduce individual and community risk of violence)
• empowerment components (such as collectivisation and mobilisation of FSWs to enable critical thinking around violence and sex work)
• violence prevention components (such as working with police and other key stakeholders to become protectors from - rather than purveyors of - violence)

Who is conducting this research?
A group of researchers are working together to lead this study.

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Awareness raising event held by the Kenya Sex Workers Alliance on International Day for Sex Workers
References


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