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Tailoring combination HIV prevention for female sex workers

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Graphical Abstract



Prevention of HIV includes behavioural, biomedical, and structural approaches to reduce the risk of infection and transmission.¹ Although randomised controlled trials have shown the efficacy of antiretroviral-based prevention interventions in isolation,^{2,3} their integration with behavioural and structural interventions might be required to have the maximum effect on the health of populations most affected by HIV.⁴ Tailored combination prevention activities

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could hold particular promise for substantially altering the trajectory of the HIV epidemic in historically disenfranchised communities, such as sex workers.^{4,5}

Female sex workers are 13.5 times more likely to be infected with HIV than similarly aged women in the general population,⁶ yet they face increased barriers to access, uptake, and continuation of HIV prevention and care. The reasons are complex and multifaceted, and include stigma and discrimination, oppressive legal environments, concerns related to confidentiality, and fear of harassment and abuse.⁷ Generation of evidence supporting combination prevention approaches that address these barriers is crucial to develop the HIV response.

In *The Lancet HIV*, Frances Cowan and colleagues⁸ report the results of the SAPPH-IRe trial, a cluster-randomised trial in which a combination prevention intervention was designed to build on the existing national free sexual-health services already provided for female sex workers in Zimbabwe by Sisters with a Voice (Sisters). This programme provides peer-educator-supported sexual and reproductive health services, referral for HIV care, peer support, and legal advice, and was used in the usual-care group. The prevention intervention added community engagement to increase awareness of antiretroviral-based treatment and prevention, strengthen support networks, reduce barriers to starting antiretroviral therapy (ART) or pre-exposure prophylaxis (PrEP), and facilitate adherence. The results are striking. 14 clusters were assessed, seven in the usual-care group (3612 women seen in clinics) and seven in the intervention group (4619 women). Among women living with HIV, the proportions with viral suppression (viral load <1000 copies per mL) were 72% in the intervention group and 68% in the usual-care group. Despite stable HIV prevalence over the study period, awareness of status, uptake of ART, and virological suppression increased in the two study groups, although by a similar degree in both. The quality of care in the usual-care group of the SAPPH-IRe trial was considerably higher than that available to many female sex workers living and working in sub-Saharan Africa, and might have empowered and supported women to access services and facilitated their engagement in HIV prevention and treatment, leading to the lack of difference between groups.

Despite the encouraging results, important opportunities for improving HIV prevention services for female sex workers remain. Although nearly 40% of HIV-uninfected participants in Cowan and colleagues' intervention group started PrEP, average retention was only just over 4 months. When taken consistently, PrEP is highly effective at reducing the risk of HIV infection.⁹ As a user-controlled intervention, PrEP can be an empowering option for female sex workers who are unable to negotiate condom use. However, engagement in PrEP care requires frequent interaction with the health system.¹⁰ To maximise the potential of PrEP, therefore, combination prevention approaches will probably need to support long-term engagement. Such approaches could build on the Sisters model and include peer support and community-based empowerment activities for PrEP and incorporate HIV self-testing to reduce the overall number of visits to health facilities.^{11,12}

To end the HIV epidemic, combination prevention approaches are likely to be necessary, and a one-size-fits-all approach will not suffice. The results of the SAPPH-IRe trial⁸ indicate that achieving high HIV testing coverage and viral suppression is possible with tailored

interventions for female sex workers, but availability of culturally appropriate services varies in areas with high HIV prevalence. Women who engage in sex work are members of diverse and heterogeneous communities, and many do not identify as sex workers. Therefore, what is deemed acceptable, suitable, or both, might also vary substantially across places and populations. Evidence of the effects of tailored, innovative, and scalable interventions for specific populations, such as that assessed in the SAPPH-IRe trial, in diverse settings and populations is urgently needed to provide the best services to and reduce HIV transmission in the populations most in need.

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