Pre-exposure prophylaxis adherence and persistence in Kenyan MSM and transgender women

Poster No. 0878

Makobu Kimani[1], Elise van der Elst,[1,2] Oscar Chirro[1], Fauz Ibrahim[3], Nana Mukuria[1], Tobias Rinke de Wit[2], Susan M. Graham[4], Don Operario[5] and Eduard J. Sanders[1,2,6]

[1]KEMRI-Wellcome Trust Research Program, [2]University of Amsterdam, [3] Department of Health, Kilifi County, Kenya [4]University of Washington, [5]Brown University, [6]Nufield Department of Medicine, Oxford University

BACKGROUND

Transgender women (TGW) are an emerging key population in Kenya with high HIV incidence.*

Kenyan guidelines recommend PrEP use in anyone with ongoing risk for HIV acquisition.**

However, men who have sex with men (MSM) or TGW are not specifically targeted for PrEP initiation.

OBJECTIVES

➢To assess adherence and persistence to PrEP among MSM and TGW in coastal Kenya.

➢To explore motivations for PrEP adherence and persistence among MSM and TGW in coastal Kenya.

METHODS

Between Jan–March 2018, 42 MSM and 11 TGW enrolled in a 12-month long PrEP cohort (n=53) in Malindi.

At month 6, participants on PrEP provided a blood sample for Tenofovir drug level assessment.

Protective levels of TFV-DP defined as ≥ 700 fmol/punch equal to ≥ 4 tablets a week

A subset of 11 MSM and 8 TGW were invited for an in-depth interviews (IDI). IDI explored motivations for uptake, adherence challenges and facilitators.

RESULTS

Majority, 64% (n=34) aged between 18-24 years.

Over 60% (n=33) had only primary education.

About half (n=27) reported active sex work.

Condomless sex equally reported by TGW (72%) and MSM (80%).

Most MSM (73%) reported insertive role, TGW either receptive or versatile (90%).

Participants described their adherence as good or excellent.

Table 1: Retention and adherence to PrEP as at month 6 visit, for 53 MSM and TGW in Malindi, Kenya

		MSM n=42	%	TGW n=11	%	Total n=53	%	p-value
Month 6 visit								0.19
	On PrEP	33	79	7	64	40	76	
	Stopped PrEP	3	7	1	9	4	7	
	Lost to follow up	6	14	3	27	9	17	
TDF-DP[1] level								0.004
	Detectable	5	15	5	71	10	25	
	Undetectable	28	85	2	29	30	75	
Pills/week								0.001
	4-6 pills	0	0	3	43	3	7	
	2-3 pills	1	3	1	14	2	5	
	<2 pills	4	12	1	14	5	12	
	No pills	28	85	2	29	31	76	

[1] Tenofovir Disoproxil Fumarate-Diphosphate

Overall, 1 in 4 TGW and MSM stopped PrEP or were LFU.

Fewer MSM (15%) vs. TGW (71%) had any detectable TDF.

Only 3 (43%) TGW reached protective levels of any TDF.

QUALITATIVE FINDINGS

Both MSM and TGW indicated unplanned or frequent risky sexual encounters as main motives to take PrEP:

"…sometimes I may not be able to convince all my partners to use a condom, or someone also gets bored of condoms but is still afraid of infections..." (MSM, 24 years).

Inconsistent PrEP use was attributed to situational factors including travel and concomitant drug use:

"I went out drinking with my friends and I used some drugs. The drugs made me get confused, I got very bad diarrhea and stopped PrEP for a while…" (MSM, 27 years)

Among TGW, the opinion that PrEP use enhanced femininity facilitated adherence:

"I am also looking healthier and people tell me I look more attractive" (TGW, 24 years).

DISCUSSION AND CONCLUSIONS

Retention challenge: 1/4 participants stopped PrEP or were lost by month 6.

Over 40% TGW (3/7) had protective drug levels vs. no protective levels in MSM.

TGW appear to have more agency to take PrEP.

Individualized PrEP adherence counselling will be needed to support MSM and TGW.

* Kimani et al, JIAS 2019

** NASCOP, Guidelines on use of Antiretroviral Drugs for Treating and Preventing HIV Infection in Kenya. 2016