



Characteristics of clients with multiple independent oral Pre-Exposure Prophylaxis (PrEP) uses in the Jilinde project, Kenya

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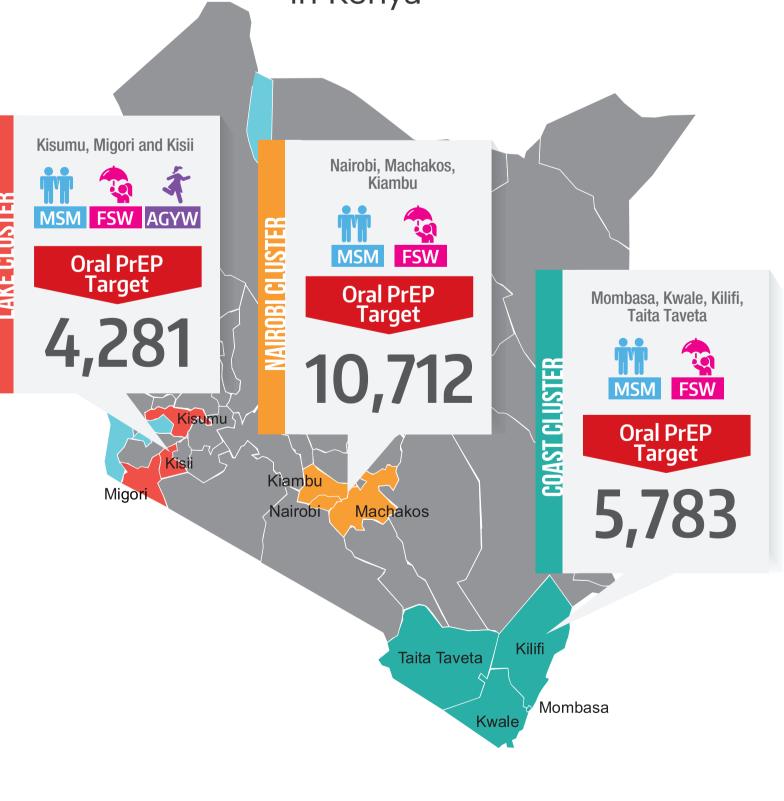


Background

- While oral PrEP represents a significant biomedical addition to HIV prevention efforts, efficacy depends on effective use throughout periods of risk
- Daily use is recommended by WHO for those at substantial HIV risk
- Given the vast typology of risky sexual behaviors, no single PrEP dosing regimen suits all, and many clients may be expected to take PrEP episodically for short-term risk
- Multiple episodic uses pose a fundamental monitoring and evaluation (M&E) challenge in estimating continuity and periodicity of use when PrEP is delivered at public health scale

Jilinde Project

- Four-year project funded by the Bill & Melinda Gates Foundation
- Goal is to demonstrate and document an effective model for PrEP scale up
- Prioritizes female sex workers (FSW), men who have sex with men (MSM), and adolescent girls & young women (AGYW)
- Supports PrEP integration through drop in centers (DICEs), public and private clinics in Kenya



Methods

- Routine PrEP services data captured using approved national PrEP Client Encounter Form
- Client level data, including prescription data, for each visit entered into Jilinde data system (JDS)
- Prescription "Refill": return < 37 days after most recent prescription
- Prescription "Restart": return > 37 days after most recent prescription
- Analyzed de-identified data for clients initiating PrEP between Feb 2017 - June 2018, all with 12 months of follow-up
- Evaluated the characteristics of clients with single vs. multiple uses
- Single use: Clients without any Restarts between prescriptions, including clients who only initiated PrEP (no follow-up prescriptions)
- Multiple use cycles: Clients with one or more Restarts between prescriptions, indicative of use that was not daily



Objective

 The objective of this abstract is to characterize Jilinde clients prescriptions as a proxy of single/ continuous vs. episodic use



Socio-demographic characteristics of the clients (N=9,423)

Characteristic	Category	Frequency (%)
Age in years	15-24 years	4,538 (48.2%)
	25 and above	4,885 (51.8%)
Gender	Female	6,864 (72.8%)
	Male	2,559 (27.2%)
Marital status	Single/ never married	6,732 (71.4%)
	Married/ ever married	2,691 (28.6%)
Facility type	DICE	6,443 (68.4%)
	Private	549 (5.8%)
	Public	2,431 (25.8%)
Referral channel	Peer	3,705 (39.3%)
	Outreach	1,428 (15.2)
	Inter facility transfers	4,290 (45.5%)

Results

Socio-demographic factors associated with multiple independent PrEP use (N=9,423)

Factors	Category	Single PrEP use N=6,377 (67.7%)	Multiple uses N=3,046 (32.3%)	OR (95% CI)
Age in years	15 - 24 years	3,227 (50.6%)	1,311 (43.0%)	Ref.
	25 and above	3,150 (49.4%)	1,735 (57.0%)	1.36 (1.24-1.48)
Gender	Female	4,729 (74.2%)	2,135 (70.1%)	Ref.
	Male	1,648 (25.8%)	911 (29.9%)	1.22 (1.11-1.35)
Population type	AGYW	168 (2.6%)	28 (0.9%)	Ref.
	Discordant couple	488 (7.7%)	312 (10.2%)	3.84 (2.51-5.86)
	FSW	3,721 (58.4%)	1,798 (59.0%)	2.90 (1.94-4.34)
	General population	1,018 (16.0%)	265 (8.7%)	1.56 (1.02-2.38)
	MSM	982 (15.4%)	643 (21.1%)	3.93 (2.60-5.93)
Facility type	Drop-in center	4,258 (66.8%)	2,185 (71.7%)	Ref.
	Private	359 (5.6%)	190 (6.2%)	1.03 (0.86-1.24)
	Public	1,760 (27.6%)	671 (22.0%)	0.74 (0.67-0.82)
Referral channel	Peer	2,684 (42.1%)	1,021 (33.5%)	Ref.
	Outreach	930 (14.6%)	498 (16.3%)	1.41 (1.24-1.60)
	Interdepartmental transfer	2,763 (43.3%)	1,527 (50.2%)	1.45 (1.32-1.60)

Risk behaviors associated with multiple independent uses (N=9,423)

		Single PrEP Use	Multiple Uses		
Risk Behaviors	Category	N=6,377 (67.7%)	N=3,046 (32.3%)	OR (95% CI)	
HIV positive partner	No	5,833 (91.5%)	2,635 (86.5%)	Ref.	
	Yes	544 (8.5%)	411 (13.5%)	1.67 (1.46-1.92)	
Sex with high risk partner	No	1,417 (22.2%)	892 (29.3%)	Ref.	
Sex with high risk partner whose HIV status is unknown	Yes	4,960 (77.8%)	2,154 (70.7%)	0.69 (0.63-0.76)	
Transactional sex	No	3,613 (56.7%)	1,654 (54.3%)	Ref.	
	Yes	2,764 (43.3%)	1,392 (45.7%)	1.10 (1.01-1.20)	

Independent predictors of multiple PrEP use cycles

		A.O.R. 95% C.I		
Variable	Category	A.O.R.	Lower	Upper
A	15-24	Ref.		
Age	25 and above	1.21	1.11	1.33
Operation	Female	Ref.		
Gender	Male	0.92	0.76	1.13
	AGYW	Ref.		
	MSM	4.73	2.93	7.63
Key population type	General population	1.92	1.24	2.99
	FSW	3.40	2.20	5.24
	Discordant couple	2.48	1.53	4.01
	DICE	Ref.		
Facility type	Public	0.72	0.62	0.85
	Private	0.73	0.59	0.90
	Peer	Ref.		
Referral channel	Inter facility transfers	1.45	1.28	1.63
	Outreach	1.42	1.21	1.66
	Yes	Ref.		
HIV positive partner	No	1.65	1.33	2.05
Sex with high risk partner whose	Yes	Ref.		
status is unknown	No	0.77	0.68	0.87
	Yes	Ref.		
Transactional sex	No	0.89	0.80	0.99

Conclusion

- Approximately 32.3% of those starting PrEP had some interruption in daily use followed by at least one restart at a later date.
- Though we found statistically significant predictors of multiple use cycles, effect sizes were minimal, suggesting the phenomenon is not unique to any particular user sub-group.
- All clients should be counseled about the importance of daily use sufficiently before and throughout periods of risk, and effective non-daily dosing regimens and complementary counseling should be explored for those with intermittent risk.

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