



PEPFAR PROMOTE STUDY

High Frequency of Unintended Pregnancy and Predictors of Contraceptive Choice among HIV-infected African Women on Lifelong ART

J. Aizire , N. Yende , T. Nematadzira , M.E. Nyati , S. Dadabhai , L. Chinula , C. Nakaye , M. Naidoo , M.G. Fowler , T. Taha , US-PEPFAR PROMOTE Cohort

Sherika Hanley

6 August 2018

Background



- ❑ More than 85% of unintended pregnancies are attributed to women with a desire to limit or space births who are not using an **effective family planning (EFP)** method [*injectable, oral, implant, intra-uterine contraceptive device (IUCD), tubal ligation*]
- ❑ Most commonly reported reasons for not using modern FP: infrequent sex and safety/side-effects. Others: postpartum/breastfeeding, opposition by the partner, access related reasons
- ❑ **LARC** methods (implants or IUCD) are the most effective, and suitable for women who report infrequent sex, or hormonal side-effects

Study design



HIV infected women on ART

Methods

- Standardized procedures across 8 sites in 4 countries (Malawi, Uganda, South Africa and Zimbabwe)
- Wilcoxon Rank-Sum tests (continuous variables)
- Chi-square test (categorical variables)
- Poisson regression (with robust variance) to explore correlates of contraceptive choice

Baseline assessments

Follow-up assessments

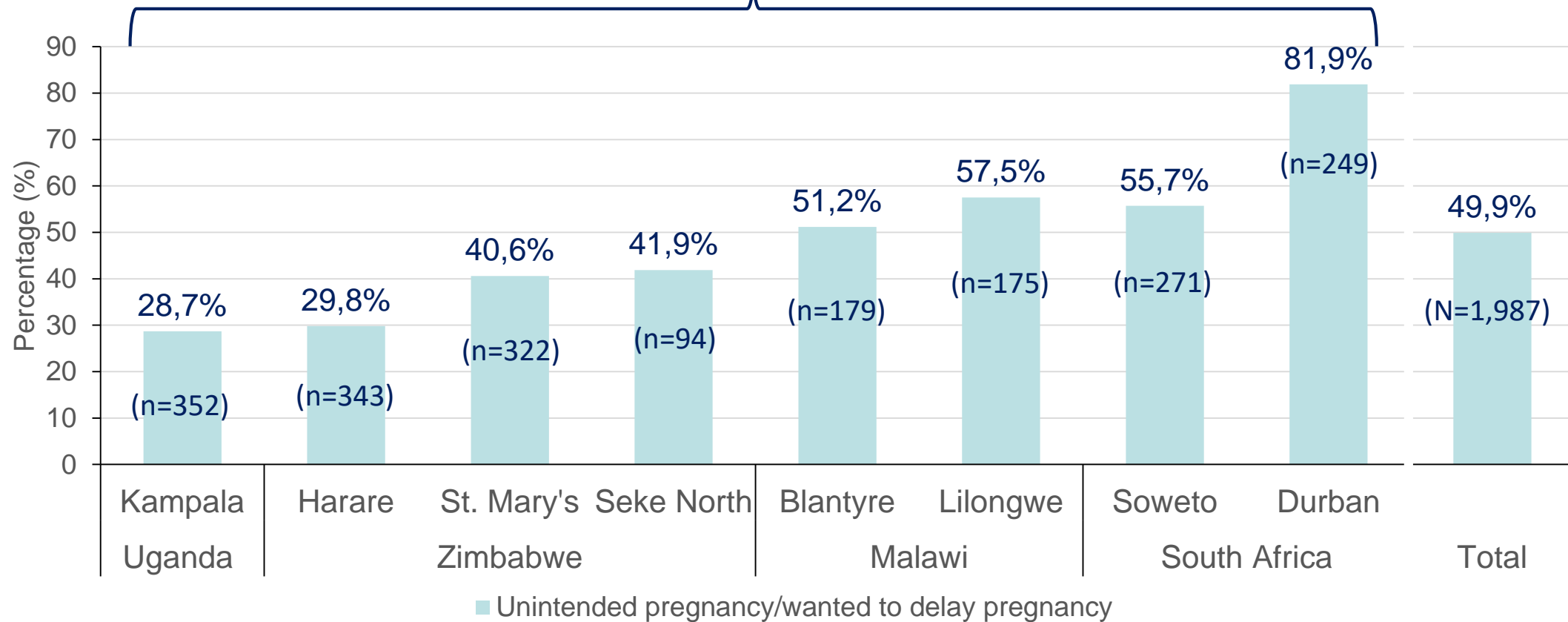
- Socio-demographic data
- Clinical data (reproductive health)
- Lab data plus stored samples

2021

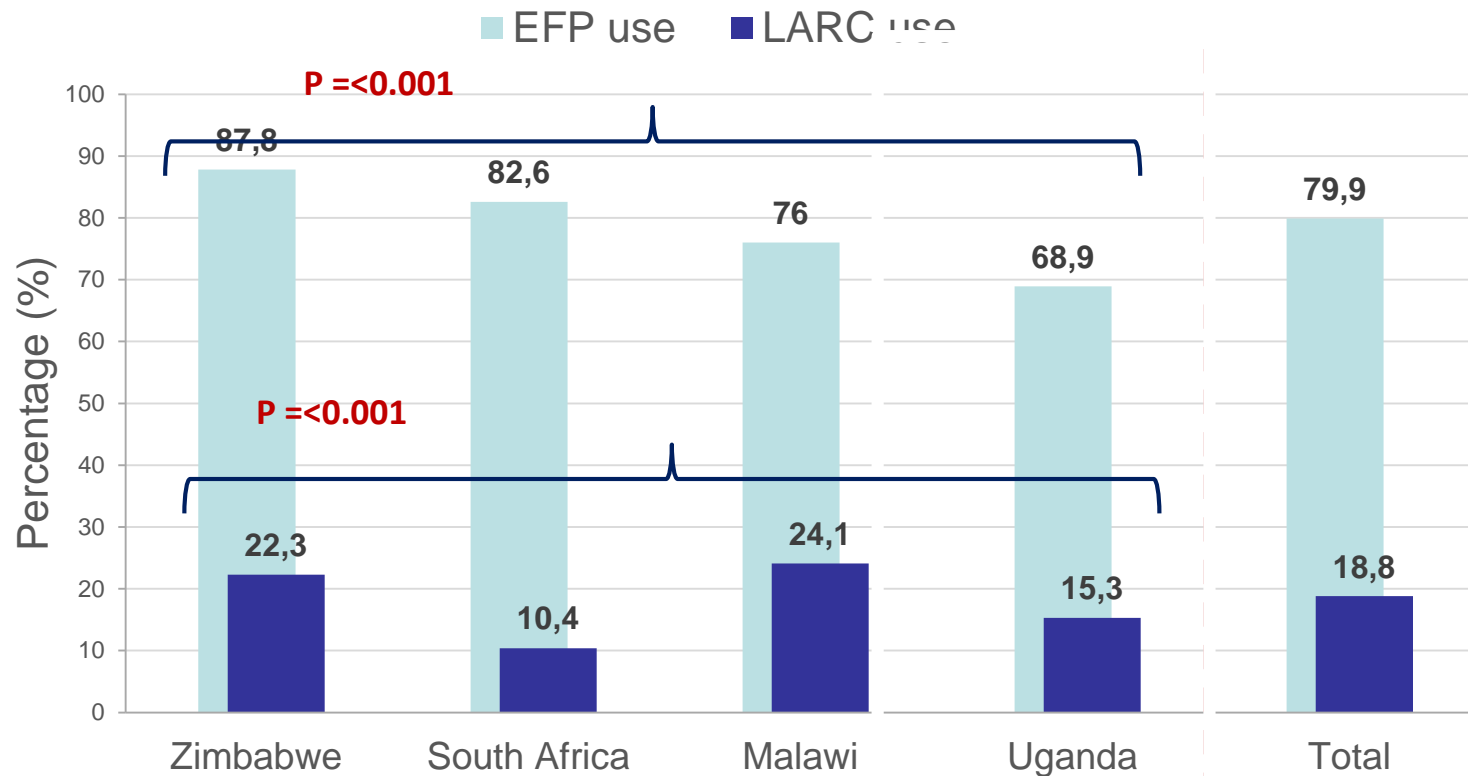
High reports of unintended pregnancy (at last conception)



Variations by site (P <0.001)



Use of Effective Family Planning (EFP) and Long Acting Reversible Contraceptive (LARC) methods



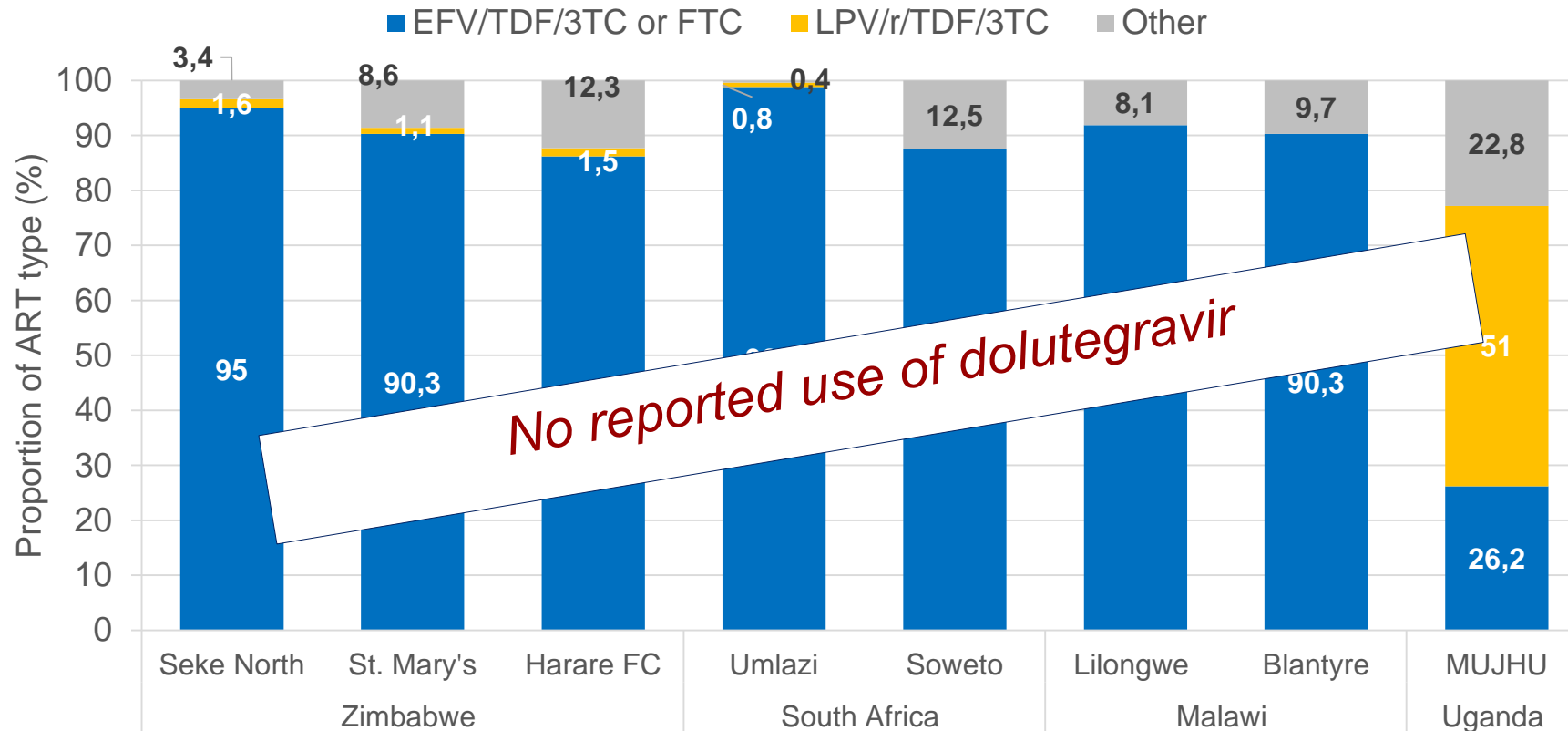
Baseline characteristics (by reported EFP use at study entry)



Demographic and socioeconomic factors

Characteristic	Overall (N=1,295)	EFP use (n=1,054)	No EFP use (n=241)	P value
Maternal-age (years), median [IQR]	31 [28-35]	31 [28-35]	31 [28-35]	
Married/regular partner, n (%)	1,145 (88.4%)	1,000 (94.8%)	145 (60.2%)	<0.001
Unintended pregnancy, n (%)	1,145 (88.4%)	1,000 (94.8%)	145 (60.2%)	<0.001
Desire for pregnancy, n (%)	1,145 (88.4%)	1,000 (94.8%)	145 (60.2%)	<0.001
Co-factors were homogeneous across LARC groups except:				
• Unemployed women were less likely to report LARC use (p = 0.008)				
• ART users less likely to report LARC use (p=0.001)				
• Viral load (>1000 copies/ml) were less like to report LARC use (p=0.003)				
Currently on ART, n (%)	1,265 (97.7%)	1,030 (97.7%)	235 (97.5%)	0.844
Viral load (>1,000 copies/ml), n (%)	112 (8.9%)	99 (9.6%)	13 (5.7%)	0.029

Baseline characteristics (ART regimens used at study entry)



Correlates of EFP and LARC use at PROMOTE study baseline



	EFP use		LARC use	
	Adjusted RR (95% CI)	P value	Adjusted RR (95% CI)	P value
Unintended pregnancy	1.05 (0.99-1.11)	0.086	1.18 (0.93-1.49)	0.174
Desire another child	0.92 (0.87-0.99)	0.017	1.05 (0.81-1.37)	0.703
Sex in last 3 months	0.81 (0.76-0.87)	<0.001	0.90 (0.61-1.32)	0.582
Married	1.10 (0.99-1.20)	0.064	0.86 (0.61-1.20)	0.365
Completed primary school	0.92 (0.85-0.99)	0.03	0.83 (0.61-1.11)	0.202
Housewife/ no formal income	0.94 (0.88-1.00)	0.066	0.66 (0.48-0.91)	0.011
Electricity in household, yes	0.97 (0.91-1.04)	0.419	1.33 (1.01-1.76)	0.04
Clinic travel time \geq 1 hour	0.97 (0.91-1.04)	0.401	0.90 (0.68-1.20)	0.486
Viral load, \leq 1000 copies/ml	1.10 (1.02-1.19)	0.013	1.64 (1.20-2.23)	0.002

Modified Poisson regression (robust variance estimator); adjusted for age and country

Conclusion



Future plans/ policy implications

- ❑ Planned PROMOTE cohort analyses
 - *Incidence and correlates of unintended pregnancy through 18 months follow-up*
 - *Interactions between ART (efavirenz) and hormonal contraceptives and risk of unintended pregnancy (quantitative measures of ART and exogenous hormonal levels on stored samples)*
- ❑ Policy considerations for HIV infected women on ART
 - ❑ Risk of congenital anomalies associated with dolutegravir

Acknowledgements



THE PROMOTE PROTOCOL TEAM GRATEFULLY ACKNOWLEDGES THE DEDICATION AND COMMITMENT OF THE MORE THAN 1,900 STUDY MOTHERS



Sponsors: US PEPFAR (Nareen Abboud)
Protocol Chairs : Taha Taha, MG Fowler
Statistical and Data Management Center:
N, Yende, P Radebe, S Brummel, A Jeewa, N Hua
Site PROMOTE Investigators:
Blantyre, Malawi B Makanani
Lilongwe, Malawi L Chinula
Kampala, Uganda M Owor
Harare, Zimbabwe T Chipato
Soweto, South Africa ME Nyati
Durban, South Africa S Hanley

