

Risk Factors for Periconception Non-Suppression Among Women Living with HIV in Kisumu, Kenya

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Introduction

We must identify specific demographics that put pregnant and postpartum women living with HIV (WLHIV) at a higher risk for vertical-transmission and offer targeted prevention of mother-to-child transmission (PMTCT) interventions.

Few studies have examined the roles of age, gravida, and duration on ART on viral suppression during periconception in WLHIV.

Methods

Using data from 301 pregnant women with HIV on antiretroviral treatment enrolled in the ongoing Opt4Mamas study between March and November 2019, we evaluated associations among age, gravida, duration on ART and periconception viral suppression (< 40 copies/mL) within 12 months of study enrollment.

We conducted univariate and multivariate logistic regression, calculating odds ratios (OR) and 95% confidence intervals (CI).

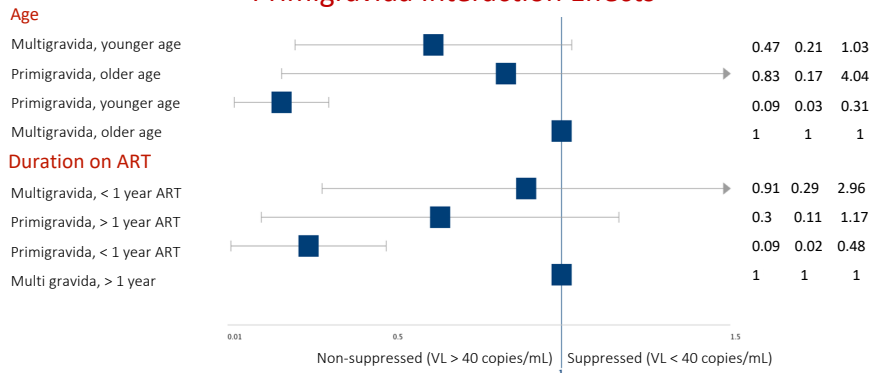


Results

Table 1. Comparison of pregnant women with HIV by periconception viral suppression

Characteristic	Variables	Non-suppressed	Suppressed	Total	OR (95% CI)	p-value
		(VL>40 copies/mL) n=64	(VL<40 copies/mL) n=237			
Age	<25 years	20 (31%)	29 (12%)	49 (16%)	0.31 (0.16-0.60)	0.000
	>24 years	44 (69%)	207 (88%)	251 (84%)	1.0 (ref)	
Gravida	Primigravida	11 (17%)	12 (5%)	23 (8%)	0.25 (0.11 - 0.61)	0.002
	Multigravida	52 (83%)	224 (95%)	276 (92%)	1.0 (ref)	
Duration on ART	<1 year	9 (17%)	18 (9%)	27 (11%)	0.49 (0.20-1.15)	0.102
	>1year	44 (83%)	181 (91%)	225 (89%)	1.0 (ref)	
ART- antiretroviral treatment						

Primigravida Interaction Effects



Key Findings

Young women (<25 years) and primigravida women are less likely to be virally suppressed

Primigravida women who were younger than 25 years or who had less than 1 year of ART had significantly reduced odds of achieving viral suppression in the past year

Conclusions

Risk factors for non-suppression around the time of conception in WLHIV include primigravida status, which is modified by age and duration on ART

Interventions targeting viral suppression among WLHIV leading up to their first pregnancy are needed, particularly among those who are newly initiated onto ART or younger age.

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