

Undisclosed antiretroviral therapy use at primary health care clinics in rural KwaZulu-Natal South Africa: A DO-ART Trial Sub-study

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Background

- Accurate reporting of antiretroviral therapy is crucial for measuring success of epidemic control

- Programs without linked electronic medical records are susceptible to duplicating reports of initiation

Methods

- Data from the DO ART Clinical Trial which enrolled individuals presenting to clinics in South Africa for initiation of ART

- We estimated the proportion of individuals presenting for ART initiation or re-initiation but with viral load suppression

- We fit regression models to identify social and clinical correlates of non-disclosure of ART use

- To identify if an integrated health system would have identified these individuals, we explored clinical and national databases to identify records of ART use

- To validate our findings, we measured tenofovir (TDF) and emtricitabine (FTC) levels in dried blood spots.

Table 1. Univariable and multivariable regression models for correlates of presentation with undetectable viral load

Characteristic	Univariable Models		Multivariable Models	
	OR (95%CI)	P-value	AOR (95%CI)	P-value
Female	1.72 (0.91 – 3.24)	0.09	2.16 (1.08-4.30)	0.03
Age				
18-29	REF			
30-49	0.80 (0.43-1.50)	0.49		
>=50	0.55 (0.14-2.15)	0.39		
Distance from clinic				
<3 Km	REF		REF	
3 – 5km	0.54 (0.24-1.23)	0.14	0.49 (0.20-1.18)	0.12
≥ 5km	0.69 (0.22-2.09)	0.51	0.70 (0.23-2.13)	0.54
Clinic				
Madwaleni	REF			
Nkundusi	1.26 (0.66-2.41)	0.47		
HIV Testing and Disclosure Status				
No prior positive HIV test	REF		REF	
Prior HIV test, non-disclosed*	1.20 (0.51-2.82)	0.67	1.35 (0.56-3.28)	0.50
Prior HIV test, disclosed	2.64 (1.27-5.27)	0.01	2.48 (1.13-5.46)	0.02
Partner with HIV	2.03 (1.07-3.85)	0.03	1.94 (0.95-3.96)	0.07

Results

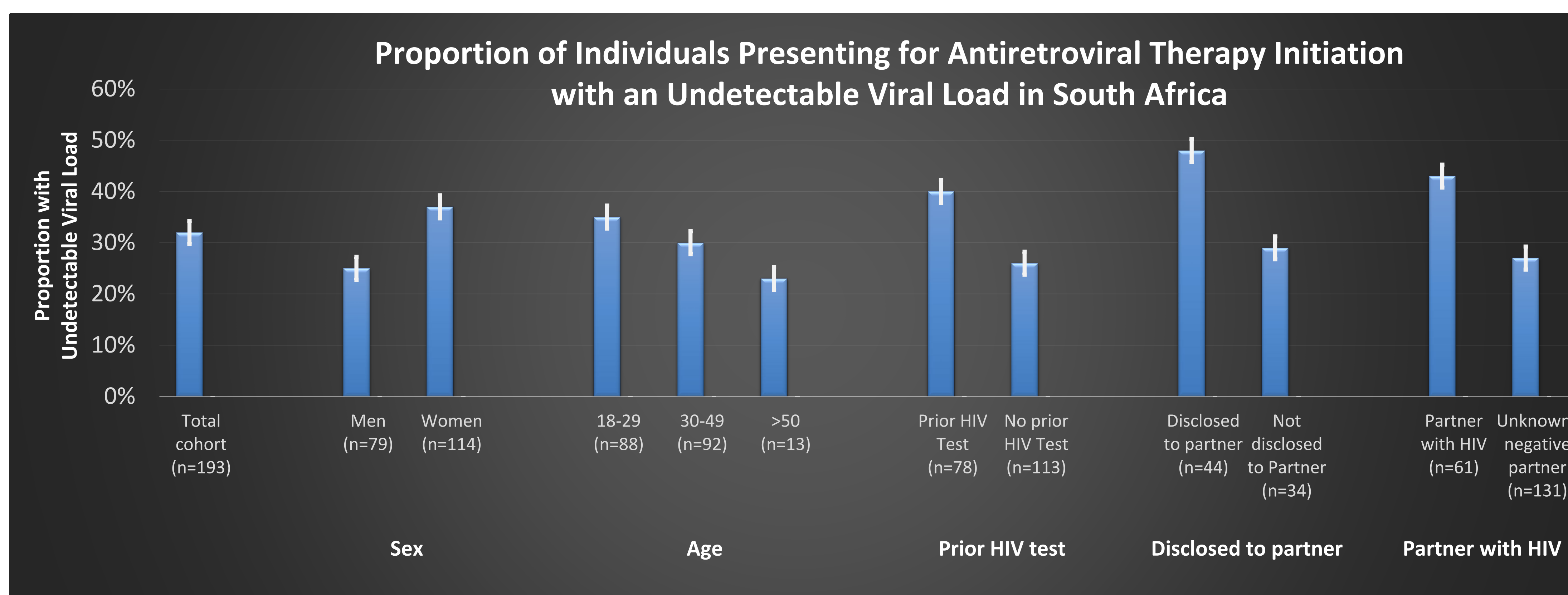


Figure 1. Individuals presenting to care for ART initiation or re-initiation with undetectable viral loads

Summary

Undisclosed ART use was present in approximately 1/3 individuals presenting for ART initiation at ambulatory HIV clinics in South Africa. Non-disclosure of ART use is common and has important implications for HIV program design and resource allocation

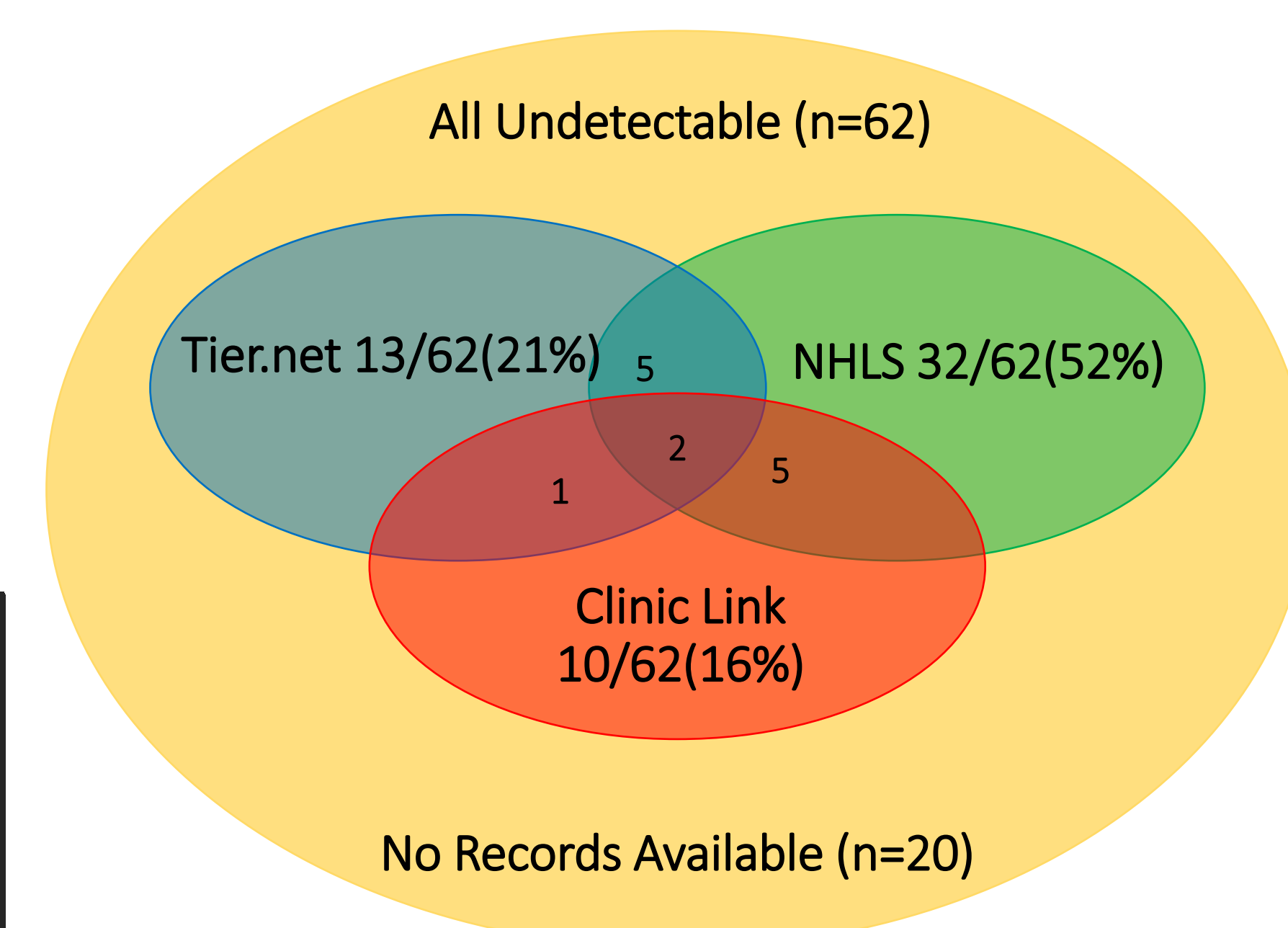


Figure 2. Venn diagram demonstrating the presence of prior records of ART use