

CombinADO study: results following a youth-informed, multicomponent intervention to improve viral suppression among HIV-infected adolescents and young adults in Mozambique

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No conflicts of interest




WCE

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AYAHIV (individuals aged 10-24 years), especially in SSA, remain the only age group with increasing mortality rates

BARRIERS:
Health system
Inter-personal
Individual

-  Retention in HIV care
-  Uptake ART
-  Achievement of viral suppression

AYAHIV (individuals aged 10-24 years), especially in SSA, remain the only age group with increasing mortality rates

BARRIERS

Health system

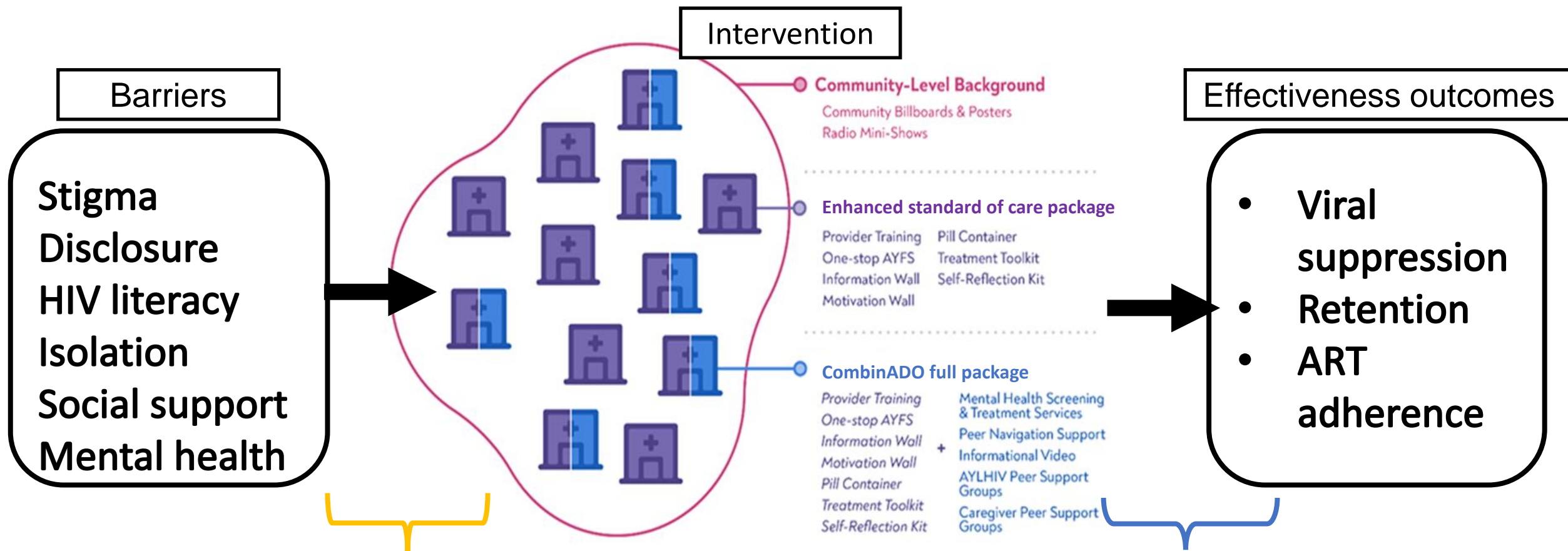
Inter-personal

Individual

Provinces of Mozambique



CombinADO study: Goal & design



Multi-stakeholder collaborative design & development

12 months implementation in 12 health facilities
Cluster RCT : Sept 2021–July 2023

Goal: To develop and evaluate a multicomponent intervention to improve HIV outcomes among youth (10–24 years) of Nampula, Northern Mozambique

Measures and analysis

Measure	Definition	Source
Viral suppression	Viral load < 50 copies/mL (<200 , <1000 copies/mL)	Blood samples (12-month post-intervention one-time visit)
Socio-demographics	Age, sex, relationship status, vocation, etc.	Surveys (12-month post-intervention one-time visit)
Clinical characteristics	ART history ART regimen	Routine clinical data (post-intervention)

Regression model: Multivariate logistic regression using GEE

Participant characteristics by study condition (N=1,380)

Characteristic	Total	CombinADO	eSOC
Number of AYAHIV enrolled [n (%)]	1,380	648 (47)	732 (53)
Age category			
10–11 years	50 (4)	26 (4)	24 (3)
12–14 years	301 (22)	144 (22)	157 (21)
15–19 years	495 (36)	196 (30)	299 (41)
20–24 years	534 (39)	282 (44)	252 (34)
Female	918 (67)	439 (68)	479 (65)
School attendance	1,040 (75)	467 (72)	573 (78)
SES category, n=1,330 ¹			
Lowest	250 (38)	250 (40)	250 (35)
Moderate	566 (42)	260 (42)	306 (43)
Highest	152 (20)	112 (18)	152 (22)
Age at ART initiation [median (IQR), years], n=1,375 ²	15.3 (8.9–19.3)	15.7 (9.3–19.6)	14.9 (8.4–18.9)
ART regimen, n=1,368 ³			
TLD (TDF + 3TC +DTG)	1,303 (95)	619 (96)	684 (95)
Other	65 (5)	25 (4)	40 (5)

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VS <50 copies/mL 12 months after intervention: 54%

No differences across study condition

eSOC 55% versus CombinADO 54%

VS increased with age

43% 10–14 yrs, 58% 15–24 yrs

Females more likely to achieve VS than males

Females 56% versus Males 50%

VS at different thresholds did not vary by intervention condition:

<200 copies/mL: 71%, <1000 copies/mL: 81%

Factors associated with VS<50 copies/mL 12 months after intervention

Covariate	aOR	95% CI	p-value
Viral suppression in 10–24-year-olds (n=1,380)			
Age: 20–24 vs 10–11	2.03	1.10–3.73	0.023

Model adjusted: Intervention arm, Age, Sex

Results: Factors associated with VS<50 copies/mL 12 months after intervention

Covariate	aOR	95% CI	p-value
Viral suppression in 10–24-year-olds (n=1,380)			
Age: 20–24 vs 10–11	2.03	1.10, 3.73	0.023
Viral suppression in 15–24-year-olds (n=1,029)			
Age: 20–24 vs 15–19	1.60	1.30, 1.97	<0.001
SES : Moderate vs lowest	1.48	1.15, 1.91	0.002
Highest vs lowest	2.05	1.43, 2.93	<0.001

Model adjusted: Intervention arm, Age, Sex, Socioeconomic status (SES)

Conclusions

Overall low VS rates in youth in adolescent-friendly-youth services in Nampula, Mozambique

The CombinADO strategy, a multi-component youth-focused intervention, did not improve VS rates among AYAHIV

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