

## Background

- Delays in HIV diagnosis and enrolment in care have been persistent barriers to achieve the 90-90-90 WHO goals in Latin America.
- Between 38-45% of patients in our region enroll in care with advanced disease HIV-disease (CD4 counts <200 cells/uL), and > 60% present late to care (CD4 <350 cells/uL), driving steady mortality rates in Latin America.
- Our goal is to describe frequency of late presentation to care among centers from the HIV Latin American Workshop (2013-2017).

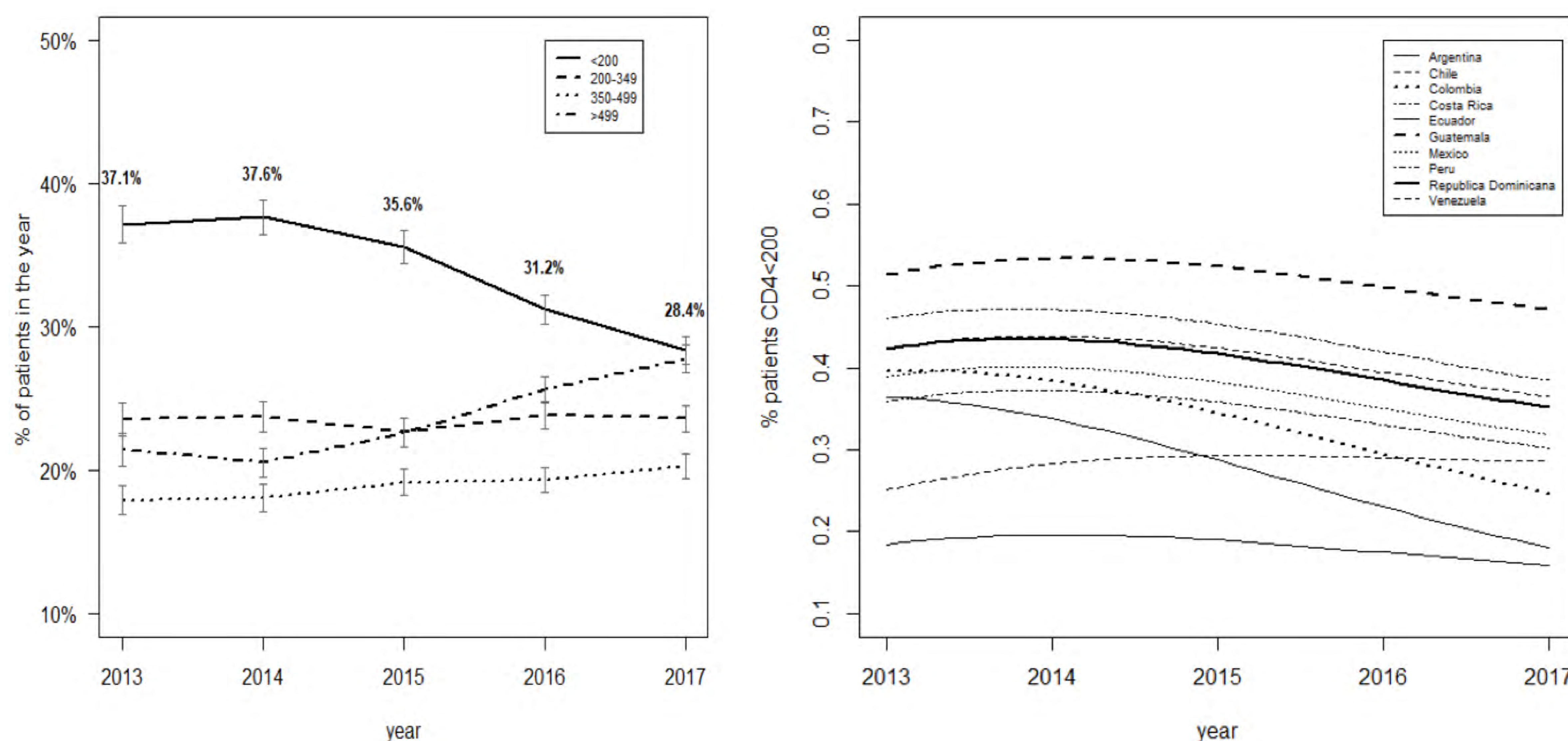
## Material and methods

- Ecological analysis of data from 31 centres in 10 Latin American countries.
- Data organized in 12 strata of age and sex, 4 strata of CD4 (<200, 200-349, 350-499, >499 cel/uL), and 5 strata of calendar-year of enrolment (2013-2017).
- “Timely presentation” (TP) defined as CD4 >499 cells/uL, “late presentation” (LP) as <350 cells/uL and advanced HIV-disease (AIDS) as <200 cells/uL, all at enrolment.
- We used contingency tables and random effect (strata, centre and country) logistic models to observe trends over time.
- We explored covariables associated to AIDS at enrolment and reported crude and adjusted Odd Ratios (OR).

## Results

- We analysed data of 34,679 (7.4%) people of an estimate of 470,165 receiving care in these countries.
- During 2013–2017, LP decreased with important heterogeneity by country and age group and TP increased (p < 0.05) (**Figure 1**).
- Covariables associated to decreased risk of AIDS at enrollment (using random-effects logistic models summarized in **Table 1**).
- Heterogeneity for AIDS between countries was around 1%, while between centres close to 6%.

**Figure 1.** Trends of (A) “Timely presentation” (CD4 >499 cells/uL), “Late Presentation” (LP) (<350 cells/uL) to care, and advanced HIV-disease (AIDS) (<200 cells/uL) at enrolment in 34,679 people with HIV enrolled in care in 31 centres in 10 Latin American countries participating in the Latin American Workshop Study Group (2013-2017) and of (B) frequency of AIDS at enrollment by country



**Table 1.** Factors associated with AIDS at enrollment in 34,679 people with HIV enrolled in care in 31 centres in 10 Latin American countries participating in the Latin American Workshop Study Group (2013-2017) <sup>1</sup>

Covariable	Adjusted OR (95%CI)	Adjusted OR (95%CI)
<b>Female vs Male</b>	1.02 (0.96, 1.09)	<b>0.91 (0.85, 0.97)</b>
<b>Age group, (Ref.:15-29yo)</b>		
30-39yo	2.03 (1.92, 2.15)	<b>2.02 (1.90, 2.13)</b>
40-49yo	2.80 (2.62, 3.00)	<b>2.77 (2.59, 2.97)</b>
50-59yo	3.07 (2.82, 3.35)	<b>3.04 (2.79, 3.32)</b>
60-69yo	3.32 (2.86, 3.85)	<b>3.26 (2.81, 3.78)</b>
>70yo	3.95 (2.97, 5.24)	<b>3.93 (2.96, 5.21)</b>
<b>Year of enrolment, (Ref: 2013)</b>		
2014	1.03 (0.96, 1.12)	1.06 (0.98, 1.15)
2015	0.98 (0.90, 1.06)	1.01 (0.94, 1.10)
2016	0.81 (0.75, 0.88)	<b>0.87 (0.80, 0.94)</b>
2017	0.71 (0.66, 0.76)	<b>0.78 (0.72, 0.84)</b>
<b>Private vs public centre</b>	0.69 (0.45, 1.07)	<b>0.50 (0.30, 0.82)</b>

<sup>1</sup> Odds ratios estimated using random effect (strata, centre and country) logistic models including gender, age group, calendar-year of enrollment, and characteristics of centres: funding (private vs. public), location (capital vs province), number of specialists per patient available, reported shortages of HIV-RNA measurements and ART supply. Only statistically significant covariables were included in the table.

## Conclusions

- In this large observational study we observed that timely presentation to enrolment in care modestly increase in Latin America in recent years, mainly due to decrease of AIDS at enrolment.
- Heterogeneity in trends across countries is large with important differences by age group and source of funding.
- Women, younger age at enrolment, enrolment after 2016, and in privately funded centres were associated to lower risk of AIDS at enrolment.
- AIDS and LP at enrolment are still important problems in our countries, with consequences in HIV transmission, morbidity and mortality.



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