

# Late diagnosis of HIV during the COVID-19 pandemic in an LMIC: an emerging challenge



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## BACKGROUND

In Argentina, around 4500 new cases of HIV are notified each year, 30% are diagnosed in advanced stages of the disease. The impact of the disruption of HIV-related services due to the COVID-19 pandemic on the late diagnosis of HIV and AIDS-defining diseases in LMIC is not well established.

## OBJECTIVES

The aim of this study is to describe the prevalence of late diagnosis of HIV and AIDS-defining diseases in a cohort of recently diagnosed PLHIV in a LMIC.

## MATERIALS AND METHODS

Cross-sectional retrospective study.

We included 853 individuals  $\geq 18$  years with a new HIV diagnosis between 2016 and 2021, in a tertiary referral hospital.

Late diagnosis was defined as: CD4  $< 200$  cells/mm<sup>3</sup> and/or presence of an AIDS-defining disease (WHO stage 4) within 3 months of HIV diagnosis.

For data analysis two periods were delimited: pre-pandemic: 01/2016-03/2020, and pandemic: 04/2020-12/2021.

TABLE 1.

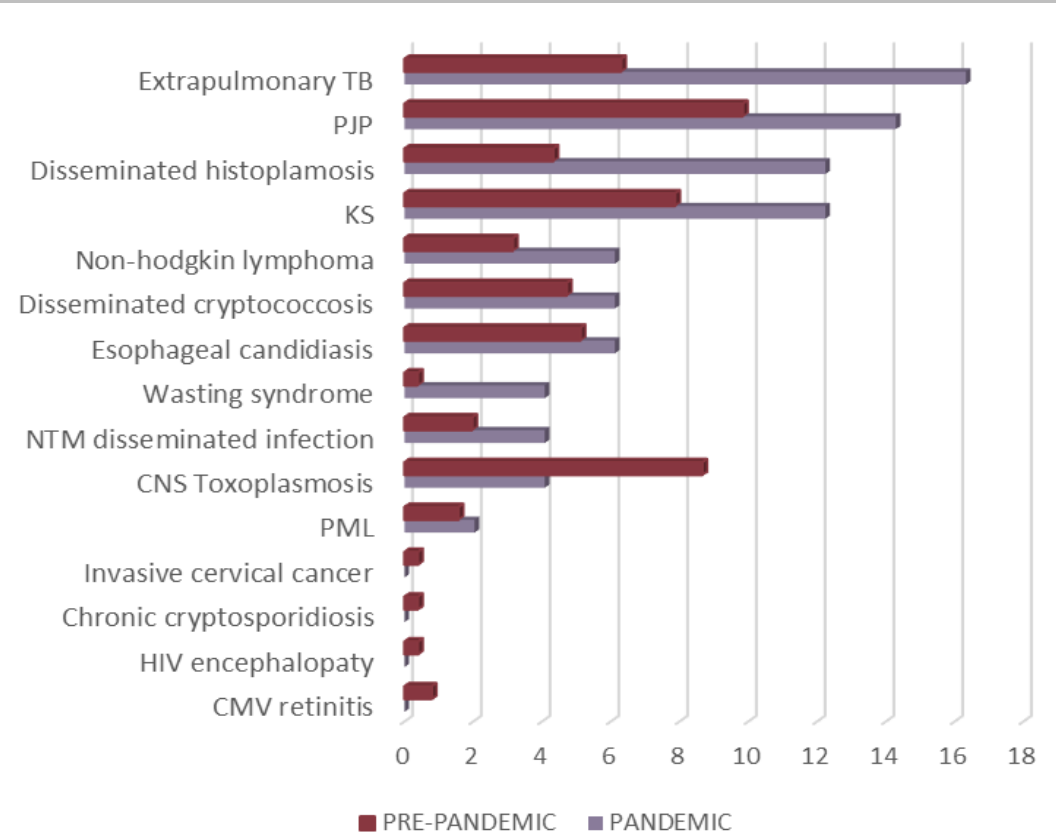
	GLOBAL n= 303	PRE-PANDEMIC n= 254	PANDEMIC n= 49	p
Late diagnosis (%)	35,5	34,7	40,2	0.2
Gender				
Cis men; n (%)	218 (72)			
Cis women; n (%)	64 (21)			
Trans women; n (%)	21 (7)			
Age; median (IQR)		36 (16)	38 (22)	0.16
CD4; median (IQR)		84 (117)	69 (120)	0.3
Defining disease; n (%)	154 (18)	124 (16,9)	30 (24,6)	<b>0.04</b>
> 1 defining disease; n (%)	29 (3,4)	18 (2,5)	11 (9)	<b>&lt; 0.00</b>

## RESULTS

Results are shown in table 1.

- Pre-pandemic period: 16.9% of individuals presented at least one AIDS-defining disease. Pandemic period: 24.6% (**p 0.04**).
- 2.5% of the individuals in the pre-pandemic period vs. 9% in the pandemic period presented more than one AIDS-defining disease (**p < 0.00**).
- There was a significant increase in extrapulmonary tuberculosis: 16 (6.3%) in the pre-pandemic period vs. 8 (16.3%) in the pandemic period (**p 0.01**), and in disseminated histoplasmosis: 11 (4.3%) in the pre-pandemic period vs. 6 (12.2%) in the pandemic period (**p 0.02**).

FIGURE 1.



TB: tuberculosis; PJP: *pneumocystis jirovecii* pneumonia; KS: Kaposi's Sarcoma; NTM: nontuberculous mycobacteria; CNS: central nervous system; PML: progressive multifocal leukoencephalopathy; HIV: human immunodeficiency virus; CMV: human cytomegalovirus

## CONCLUSIONS

During the COVID-19 pandemic, there was an increase in the prevalence of AIDS-defining diseases and in the proportion of subjects with  $\geq 2$  AIDS-defining diseases at diagnosis, particularly extrapulmonary tuberculosis and disseminated histoplasmosis. Additional efforts are needed to address the challenge of late diagnosis in LMIC.

## REFERENCES

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