

# Effect of Covid-19 lockdowns on identification of advanced HIV disease in outpatient clinics in Uganda

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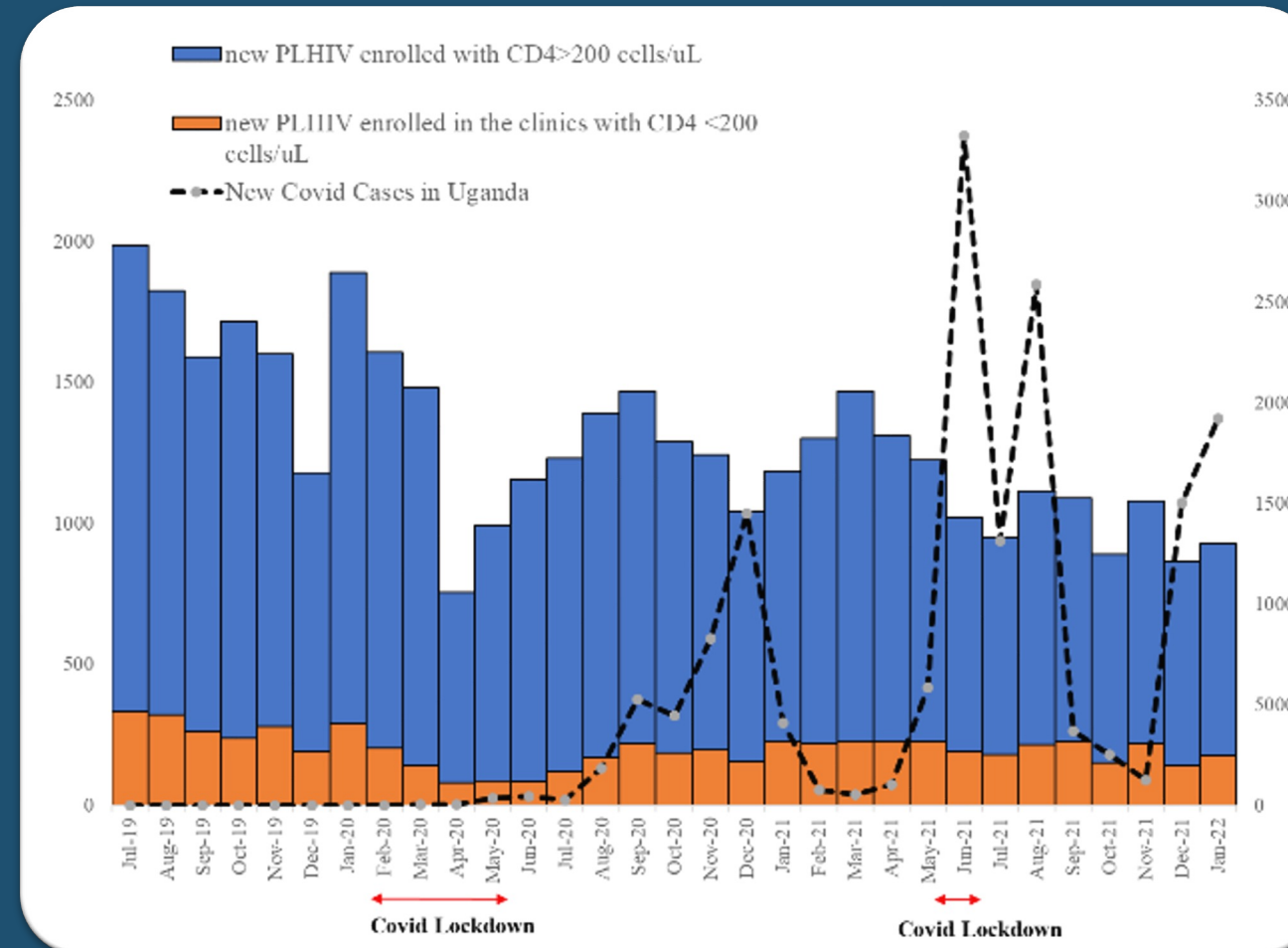
## BACKGROUND

- World Health Organization (WHO) estimates that 25-40% of persons living with HIV (PLWH) have advanced HIV disease (CD4 < 200 cells/mcL)
- Due to the host of opportunistic infections associated with advanced HIV disease screening and preemptive treatment is recommended in conjunction with ART initiation
- The Covid-19 pandemic has disrupted health care delivery via national lock downs, closure, and interruption of public transport and business. Patients are faced with challenges in accessing much needed HIV and other healthcare services.
- Objective:** To understand the impact of the Covid-19 pandemic on the identification of persons with advanced HIV disease in Ugandan HIV clinics

## METHODS

- Retrospective chart review from 67 clinics offering services to over 150,000 HIV patients surrounding Kampala, Uganda from July 1, 2019 to January 31, 2022
- Data for number of persons entering care by clinic and number of persons presenting with CD4 < 200 cells/mcL were summarized by month between July 2019 and January 2022
- We used the Johns Hopkins Coronavirus Resource Center website to summarize Ugandan Covid-19 cases by month
- Covid-19 lockdown dates were taken from the Ugandan government's COVID-19 information website
- Lockdowns**
  - First lockdown: Between March and May 2020, there was a period of strict lockdown where public transportation was halted
  - Restriction Period: Between May and July 2020 there was a less stringent lockdown (public transportation was available, but schools and many businesses remained closed)
  - Second lockdown: Between June and July 2021 a strict lockdown occurred

## RESULTS



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- Prior to the Covid-19 pandemic 16% of PLWH presented monthly with advanced HIV disease
- PLWH presenting with advanced disease dropped to 9% (102/1124) during the March 2020 Covid-19 lockdown
- During the second lockdown (June to July 2021) 19% (185/987) PLWH presented monthly with advanced HIV disease
- In the absence of lockdowns, between August 2021 and Jan 2022, 19% (188/995) presented monthly with advanced HIV disease

## SUMMARY TABLE

TIMELINE	Average PLWH monthly	% change from baseline	Average with Advanced HIV Monthly (%)
July 2019 to February 2020 Before Covid-19	1675	--	265 (16%)
March 2020 to July 2020 Lockdown	1124	-33%	102 (9%)
August 2020 to May 2021 Eased Restrictions	1294	-23%	205 (16%)
June 2021 to July 2021 Lockdown	987	-41%	185 (19%)
August 2021 to Jan 2022 Eased Restrictions	995	-41%	188 (19%)

## CONCLUSIONS

- There has been a 40% reduction in the average number of PLWH presenting to clinics since of the onset of Covid-19 in Uganda
- This reduction has persisted even in the absence of Covid-19 lockdowns
- While there has been a reduction in the number of PLWH present in HIV care, the proportion with Advanced HIV disease is rising

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