

Assessment of COVID-19 Vaccination Uptake among People Living with HIV in CDC-Supported Regions in Tanzania, August-September 2022

Authors

Abbas Ismail^{1,2}, Coline Mahende², Alexander Kailembo², Kokuhabwa Mukurasi², Elias Bukundi³, Mucho Mizinduko³, Castory Munishi³, Mbaraka Amuri², Bonner Kimberly⁴, Kulkarni Shibani⁴, Nick Schaad², Mahesh Swaminathan², George S. Mgomella², Mohamed F. Jalloh²

Affiliations

- 1 Integral Global Consulting, Tucker, Georgia, USA
- 2 US Centers for Disease Control and Prevention (CDC), Dar es Salaam, Tanzania
- 3 Muhimbili University of Health and Allied Sciences (MUHAS), Dar es Salaam, Tanzania
4. Global Immunization Division, U.S. Centers for Disease Control and Prevention, Atlanta, USA

Background

People living with HIV (PLHIV) may be at increased risk for severe COVID-19 disease. Ensuring optimal COVID-19 vaccine uptake provides an opportunity to maximize protection of PLHIV against severe COVID-19 outcomes.

In Tanzania, routine programmatic data suggested very high uptake of COVID-19 vaccination among PLHIV. However, programmatic data are characterized by data quality issues, notably related to missing or duplicate data, and inaccurate denominators.

We aimed to empirically understand drivers of COVID-19 vaccine uptake among PLHIV in select regions in Tanzania.

Messages that reassure PLHIV of the safety of COVID-19 vaccines may help to improve vaccine uptake among this population

Methods

A cross-sectional facility-based survey was rapidly conducted between August and September 2022 among 1,198 PLHIV aged 18 years and older.

The survey was conducted in six regions of Tanzania mainland and Zanzibar. A total of 106 health facilities were randomly selected and structured exit-interviews were conducted with PLHIV.

The main outcome of interest was COVID-19 vaccination uptake – defined as receiving at least one dose of a COVID-19 vaccine approved by Tanzania government.

Modified Poisson regression models accounting for facility clustering of PLHIV were used to assess correlates of COVID-19 vaccination uptake.

Results

Overall COVID-19 vaccination uptake among PLHIV in the selected regions was 78% and was highest in Kigoma region (94%).

The Janssen vaccine manufactured by Johnson and Johnson was received by 54% of PLHIV. PLHIV residing in Kigoma [aPR:1.33, CI:1.15-1.53], Tabora [aPR:1.22, CI:1.04-1.44] and Tanga [aPR:1.23, CI:1.05-1.43] were more likely to be vaccinated compared to those in Dar es Salaam region.

PLHIV who had never married [aPR: 0.85, CI:0.76-0.95] were less likely to be vaccinated.

PLHIV who responded that the COVID-19 vaccines were 'not safe at all' were less likely to be vaccinated [aPR: 0.39, CI:0.27-0.57] compared to those who responded that vaccines were safe.

Conclusion

The findings of this rapid assessment demonstrate that uptake of COVID-19 vaccination was high among PLHIV, and safety concerns were a major vaccination barrier.

Messages that reassure PLHIV of the safety of COVID-19 vaccines may help to improve vaccine uptake among this population.

Targeted vaccination strategies adapted to the urban setting in Dar es Salaam may be needed to improve uptake.

HIV AND COVID-19



HIV Basics
www.cdc.gov/hiv/basics

www.cdc.gov/hiv/basics/covid-19.html

