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COVID-19 Vaccination Rates in a Global HIV Cohort

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Since the first case of SARS-CoV-2 was reported to the WHO on December 31, 2019, more than 218 million people have been diagnosed and COVID-19 has taken the lives of more than 4.5 million people. Due to a global, concerted effort, there now exist many vaccines in the clinical and pre-clinical phases of development. While vaccination presents a safe and effective way to build immunity to the virus, vaccine access varies by country. People with HIV are immunocompromised and may likely benefit from COVID-19 vaccinations. However, little is known regarding global vaccination rates in this relevant population. Data collected on COVID-19 vaccination rates in REPRIEVE afford a unique opportunity to assess such rates across a range of Global Burden of Disease (GBD) regions. Here we compare country-specific vaccination rates between PWH enrolled in the REPRIEVE trial to rates among the general population and assess the characteristics of those vaccinated for COVID-19.

- **The participants:**
  - 6952 REPRIEVE participants active as of January 1, 2021
  - Average age: 50 years
  - 32% were natal female (female at birth)
- **Cumulative Vaccination Rates among REPRIEVE Participants:** Vaccination was defined as at least one dose of any COVID-19 vaccine. The collective vaccination rate among REPRIEVE participants through the end of July 2021 was 55%. Vaccination rates were highest in the High-Income super-region (71%), followed by Latin America and the Caribbean (59%), South Asia (49%), Southeast/East Asia (41%), and Sub-Saharan Africa (18%). Country-specific rates varied dramatically, with vaccination rates highest in the United States (72%), Peru (69%), and Brazil (63%) and lowest in South Africa (18%), Uganda (3%), and Haiti (0%).
- **Comparison to Vaccination Rates among the General Population:** Vaccination rates in the general population were derived from public databases. In general, vaccination rates in the general population were similar to those seen in REPRIEVE participants.
- **Characteristics Associated with Vaccination among REPRIEVE Participants:** Among the overall REPRIEVE population, vaccinated participants were more likely to come from high-income GBD super-region countries and to be White, male, older, have a higher BMI, higher ASCVD risk score, and longer duration of ART, but did not differ by either nadir or baseline CD4 count.

In summary: These data from REPRIEVE provide useful information on the critical question of COVID-19 vaccination rates among PWH and highlight inequities in vaccination rates across GBD super-regions. Furthermore, the data highlight subgroups among the larger global population of PWH who have low vaccine rates and should be targeted for vaccination, for example, people of color and women.

REPRIEVE Trial Website: reprievetrial.org

The findings shared in this summary are from the REPRIEVE population at a specific point in time. These findings are descriptive and not intended to change clinical care. If you have questions about what you've read, please talk to members of the REPRIEVE study team at your local site or a health care provider