Effectiveness of COVID-19 Vaccines in People Living with HIV in British Columbia and Comparisons with a Matched HIV-Negative Cohort: A Test Negative Design



Why was the study done?

Studies on the COVID-19 vaccines show that the vaccines are effective in preventing COVID-19 infection and in reducing the likelihood of people being seriously ill from COVID-19 disease in the general population. However, people living with HIV have weakened immune systems, which may decrease the effectiveness of vaccines. Yet, people living with HIV were underrepresented in COVID-19 vaccine clinical trials. As such, the study was done to identify how well two-doses of the COVID-19 vaccines work in preventing COVID-19 infection among people living with HIV and to observe how these findings compare with HIV-negative individuals.

What were the results of the study?

We found that among people living with HIV, two-doses of COVID-19 vaccines provide good level of protection against COVID-19 infection. When compared with HIV-negative individuals COVID-19 vaccines appeared to reach peak effectiveness later and the degree at which vaccine waning occurred also appeared to be quicker.

How can these findings be used?

These findings confirm the benefit of COVID-19 vaccines, even among people living with HIV. Our findings suggests that the effectiveness of vaccines wanes earlier among people living with HIV. This could help inform vaccine policies regarding booster use recommendation in people living with HIV

What is the reference for this study?

Fowokan A*, Samji H*, Puyat J, Janjua NZ, Wilton J, Wong J, Grennan T, Chambers C, Kroch A, Costiniuk CT, Cooper CL, Burchell AN, Anis A, COVAXHIV study team. Effectiveness of COVID-19 Vaccines in People Living with HIV in British Columbia and comparisons with a matched HIV-Negative Cohort: A Test Negative Design. *International Journal of Infectious Diseases* 2022. https://doi.org/10.1016/j.ijid.2022.11.035

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