“How people living with HIV are affected by COVID, and how their HIV infection affects COVID outcomes”

Findings from: Supporting studies to assess the potential role of HIV infection on COVID-19 infection and outcomes, and the impact of COVID-19 on the mental/physical health of people living with HIV, and on HIV services

What was the study about?

At the start of this study there was limited information available on how people living with HIV were affected by COVID. We had many questions about this, including whether people with HIV were more likely to die from their COVID infection, how easy or hard it was for them to get healthcare, how their HIV infection affected how bad their COVID infection was and whether they experienced any long-term physical or mental health conditions because of this. We wanted to answer these questions using several large, national, datasets.

Why is this important?

It is important to know how people living with HIV are affected by COVID, and to understand whether their stage of HIV infection affects their outcomes. We can use this information to help develop guidelines for people living with HIV during any future pandemics and to highlight groups who might have poorer outcomes.

What did we do?

- One study looked at data on symptoms and outcomes of adults with HIV who were in hospital with COVID and compared these to those of people without HIV who were in hospital with COVID over the same period. The study also looked at whether their sex, age and ethnicity affected their outcomes.

- Another study looked at data from UK clinics on people living with HIV who had confirmed or suspected COVID.

- Another study looked at data on people diagnosed with HIV with COVID who died and compared this with data on people without HIV with COVID who died.

Key findings

- The first study found that people living with HIV who were admitted to hospital because of their COVID infection were younger and had fewer existing health conditions than those admitted without HIV. After taking these factors into consideration, we found that people living with HIV were more likely to die because of their COVID infection than those without HIV.

- The second study found that severe illness in people living with HIV with COVID was more likely in people who were male, had a weaker immune system (less white blood cells), who were heavier, who had a current AIDS diagnosis, or who had more underlying health problems. Poorer outcomes were linked to older age, a weaker immune system, problems with taking HIV treatment, and other existing health issues. However, much of the risk was explained by how severe their condition was at the start of their illness.

• The third study found that compared to people without HIV, more deaths occurred in people living with HIV who were of black and Asian ethnicity and in older and younger people. They found that most people living with HIV who died because of their COVID infection had low levels of HIV virus in their blood, but had at least another health condition linked to poor COVID outcomes.

What do these findings mean?

These findings supported guidance to encourage people with HIV to receive COVID vaccinations. This was particularly the case for those from ethnic minorities and those with weaker immune systems or other health issues. These findings will help to guide how HIV infections are managed during future pandemics.

Related publication not already linked to project:
https://bhiva.org/wp-content/uploads/2024/10/AbstractBook2021.pdf O008