Link between COVID-19 Severity and HIV

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Introduction

The international community must also do a lot more to get COVID-19 vaccinations to countries with high HIV and other illness prevalence. It is unacceptable that just about 9% of the African continent has received a single dose of the vaccine and less than 1.5% has received both doses as of today. Most analyses have been conducted on relatively small cohorts of individuals in specific settings, and the impact of HIV infection on the severity and mortality of COVID-19 has been limited and occasionally contradictory. The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) have issued health alerts and prevention instructions for those who are at a higher risk of serious health consequences and death as a result of COVID-19. These recommendations are based on the outcomes and characteristics of patients who were infected early in the COVID-19 epidemic. Emerging trends point to an increased risk for older people, people in long-term care facilities, men, and racial/ethnic minorities, who have historically faced health disparities for many chronic diseases.

Description

COVID-19 mortality appears to be driven by chronic disease comorbidities, particularly multimorbidity. Anyone with asthma, chronic lung illness, diabetes, major cardiovascular problems, chronic renal disease, obesity, chronic liver disease, and people, who are immunocompromised, such as HIV patients, should take particular measures (PLHIV). The concern about PLHIV having a higher risk of severe COVID-19 disease stems from the belief that PLHIV is more likely to be immunocompromised. HIV infection is linked to aberrant humoral and T-cell-mediated immunological responses, making people more susceptible to a variety of diseases. According to this logic, PLHIV with a low CD4 cell count, severe disease, a high viral load, or who are not on antiretroviral therapy should be treated with extreme caution (ART). Many PLHIV will develop chronic illnesses associated with severe COVID-19 disease as they live longer on ART. However, substantial observational studies precisely evaluating symptoms, illness severity, complications, multimorbidity, and the fraction of COVID-19-HIV co-infected individuals who die have yet to be published. It's also unclear whether HIV-positive patients who are clinically and virologically stable face a higher risk of COVID-19 problems than the general population. Currently, data on COVID-19-HIV co-infected patients can only be found in case reports and case series [1-3].

36.2% of HIV patients had severe or significant COVID-19 symptoms at the time of presentation. COVID-19 killed 23.1% of those with a known outcome, according to the authors. Other significant risk factors for greater mortality among HIV patients who died in hospitals included age >85 (OR 1.82, 95% CI 1.62-2.04), being male (OR 1.21, 95% CI 1.15-1.28), having diabetes (OR 1.50, 95% CI 1.39-1.62), and having a hypertension diagnosis (OR 1.28, 95% CI 1.19-1.34) [4,5].

Conclusion

Patients admitted to hospitals for COVID-19 between January 2020 and April 2021 (n=168,649; 37 countries) were screened for HIV (n=15,522; 24/37 countries). The average patient age was 45, and 37.1% of those with HIV were men; 91.8% were on antiretroviral medication. The author wanted to see if HIV status was a risk factor for admission severity and in-hospital mortality. At the country level, the models were adjusted for potential correlation for clustering.

The WHO Global Clinical Platform for COVID-19 provided the data for this study. According to the findings of the study, WHO plans to include HIV infection as a risk factor in COVID-19 clinical guidelines.

Acknowledgement
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Conflict of Interests
None.

References


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