COMMENTARY

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Living with HIV in the Time of COVID-19

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Abstract

This commentary foregrounds the need to examine how the coronavirus disease 2019 (COVID-19) pandemic and associated conditions may be affecting the lives of people living with HIV (PLWH) in a developing country context like Pakistan. It raises some important questions on medical care and updated information regarding PLWH in the time of COVID-19. Since PLWH are at an increased risk of developing comorbid conditions – something that makes them more vulnerable to COVID-19 – it is critical that timely research and evidence-based actions are undertaken to protect their health.

Keywords: COVID-19; HIV/AIDS; Health; Pakistan

Introduction

The information presented in this commentary is based on the review of recent research into HIV and COVID-19 conducted internationally as well as in Pakistan. The literature was gathered from a variety of sources including relevant books, organisational research reports, and academic journals like the Lancet, the Journal of International AIDS Society, PLoS One, and the Journal of Medical Virology.

Discussion

COVID-19, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has so far affected over 26 million people with above half a million deaths worldwide. Also, there are fears of a second wave, as the government restrictions on movement are finally being eased in many worst-affected parts of the world, indicating a further increase in the number of COVID-19 cases. Based on global clinical and epidemiological data, it is now well established that people who are older and those with morbidities like hypertension, cardiovascular disease, respiratory disease, and diabetes mellitus are more susceptible to COVID-19 (1,2,3). This finding has begun to cause worry among the Human Immunodeficiency Virus (HIV) research community since people with HIV are more likely to have comorbid conditions compared to the general public due to immune activation from HIV and the side effects of HIV medication, namely antiretroviral treatment (ART) in addition to other factors like alcohol and tobacco use (4).

Nevertheless, due to effective HIV prevention and mitigation policies, including the easy access and the use of ART, PLWH can now live a longer and healthier life. This means HIV is no longer a death sentence, rather it is a chronic infection which can be managed with ART treatment adherence. So, the use of ART has led to a dramatic decrease in HIV-related deaths all over the world, since it can suppress HIV replication, leading to an undetectable viral load (5). There is also growing empirical evidence that sustained ART can be effective in halting sexual transmission of HIV even during condomless sexual intercourse (6,7,8). This is perhaps the reason why more than half of the 37.9 million PLWH across the globe are over 50 years of age (9).

A significant number of PLWH being more likely to develop comorbid conditions and being older means that they are more susceptible to COVID-19 (10). However, not much has been published on how

the coinfection of SARS-CoV-2 and HIV may affect the health of PLWH, notably in the context of Pakistan. One perspective is that a smaller number of PLWH have developed clinical manifestations of COVID-19 possibly due to their adherence to ART (11). Therefore, COVID-19 patients, in many countries like China, have been given ART, under the hope that the treatment might help combat the disease. Nevertheless, randomised control trials have shown that ART is not effective compared to the standard care in COVID-19 management (12). This contradiction implies that there is currently little evidence to suggest that PLWH who regularly take ART are less susceptible to COVID-19.

In the last decade, new HIV cases have decreased by 0.7% per annum globally (13). However, according to UNAIDS (14), the number of HIV cases in Pakistan has increased at an alarming rate of 9.1% per annum from 2005 to 2015. Importantly, the coverage of antiretroviral treatment (ART) has remained low among PLWH, with recent estimates suggesting almost half of the PLWH do not take ART in the country (15). This low level of coverage is compounded by a low uptake of services and low levels of adherence due to factors like the stigma associated with non-normative gender, sexual identities, sex work, discrimination by ART service providers, and the fear of a breach of confidentiality (16).

The death toll due to HIV/AIDS increased from 250 in 2005 to 1480 in 2015 in Pakistan (17). This increase may reflect an increase in the rate of infections over the last ten years, it also draws attention to low coverage of life-saving ART. While the prevalence of HIV remains low in the general population, the epidemic is well established and is expanding among people who inject drugs (38.3%), transgender people (7.5%), men who have sex with men (MSM) (3.4%) and female sex workers (2.1%) (18). Thus, it may not be an overstatement to say that in a developing world setting like Pakistan, where the rates of HIV are skyrocketing and the uptake of ART is not promising, COVID-19 poses a great challenge to PLWH.

Conclusion

Since the rate of COVID-19 among PLWH is not known, governmental organisations like the National AIDS Control Program (NACP), Community-Based Organisations (CBOs), and international agencies like UNAIDS may need to explore the prevalence of coinfection of SARS-CoV-2 and HIV with urgency. PLWH also need to be reached out to assess any disruptions in their ART due to this public health emergency and related governmental action such as restrictions on movement and slowdown of economic activities. Acknowledging that the majority of PLWH live on the margins of society, it may be significant to explore the extent to which they can realistically adopt COVID-19-related protective measures like social distancing, wearing masks and hand hygiene. While we grapple with the COVID-19 pandemic, we must not forget the specific biological and social vulnerabilities of PLWH in these difficult times, especially in contexts of extreme stigma and discrimination against them combined with poor healthcare resources. Timely research and evidence-based action can help to achieve this goal.

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