COVID-19 disruptions to HIV prevention could increase new infections
22 February 2021, by Dr Sabine L. Van Elsland, Stephen Johns

Disruptions to HIV prevention and treatment strategies due to the pandemic could increase new HIV infections amongst men who have sex with men.

A study published in *The Lancet HIV* predicts that reported disruptions to HIV testing and treatment services in the United States could lead to substantial increases of 11% in new HIV infections and HIV-related deaths over a one year period.

The researchers say that this increase in infections could be offset by a reduction in the number of sexual partners during the pandemic. However, this would be unlikely to offset the additional HIV-related deaths caused by service disruptions.

The study focussed on Baltimore where, during the first wave of the COVID-19 pandemic, stay-at-home orders were in effect and reduced HIV testing capacity was reported. Gay, bisexual and other men who have sex with men in Baltimore had a very high reported HIV prevalence of 37% in 2017.

**Sexual risk**

During the COVID-19 pandemic, men who have sex with men in the United States report similar or fewer sexual partners and reduced HIV testing and care access, and use of HIV prevention drug, pre-exposure prophylaxis (PrEP), has declined.

According to the study, a 25% reduction over six months in sexual partners among men who have sex with men, without changes to accessing HIV services, could reduce new HIV infections by 12% over a one year period.

**HIV prevention and treatment**

The researchers predict that COVID-19-related disruptions to HIV testing, adherence to pre-exposure prophylaxis (PrEP), condom use and viral suppression, and larger disruptions to PrEP and antiretroviral therapy (ART) initiations, without any change in sexual risk behaviour, could lead to substantial increases of 11% in new HIV infections and HIV-related deaths over a one year period.

**Excess HIV deaths**

The study results suggest a 25% or even a 50% reduction in the number of sexual partners could offset increases in new HIV infections arising from COVID-19-related disruptions to HIV services.

However, the researchers say that this would not offset additional HIV-related deaths caused by these service disruptions.

This study finds that maintaining access to antiretroviral therapy and adherence support for both existing and new users will be crucial to minimize excess HIV-related deaths arising from the COVID-19 pandemic.

Dr. Kate Mitchell, from the School of Public Health, said: "Our finding that observed disruptions to HIV treatment will lead to increased HIV-related mortality, even if people have fewer sexual
partnerships during the COVID-19 pandemic, means it is really critical that access to antiretroviral therapy and support for adherence to treatment is maintained during the COVID-19 pandemic.

Professor Marie-Claude Boily from the School of Public Health, said: "Our thorough exploration of different levels of disruption to different parts of the HIV testing and care cascade meant that we were able to really pinpoint that efforts need to be focussed on access and adherence to antiretroviral therapy to most effectively mitigate the negative effects of COVID-19 on HIV incidence and survival among gay and bisexual men in the United States."

Dr. Stefan Baral from Johns Hopkins Bloomberg School of Public Health, said: "Unmet treatment needs reinforce the importance of rapidly adapting programs to better serve people living with HIV during COVID-19 with the use of digital and telemedicine approaches, and evaluate these services to ensure they are reaching those who are most likely to disengage from treatment."