HIV and AIDS: Where Do We Stand in 2017?

Sahar Al Kattar
American University of Beirut

Laura Dosh
American University of Beirut

The human immunodeficiency virus (HIV) is a retrovirus that attacks and impairs the function of the immune cells, resulting in a progressive deterioration of the one's immunity. If left untreated, it may eventually take the form of Acquired Immunodeficiency Syndrome (AIDS), a term which applies to the advanced stages of HIV infection, defined by the occurrence of severe opportunistic infections or HIV-related cancers.[1]

While people living with HIV tend to be most infectious in the first few months, many are ignorant of their status until later stages. They may experience an influenza-like illness often described as "the worst flu ever" including fever, headache, rash, or sore throat.

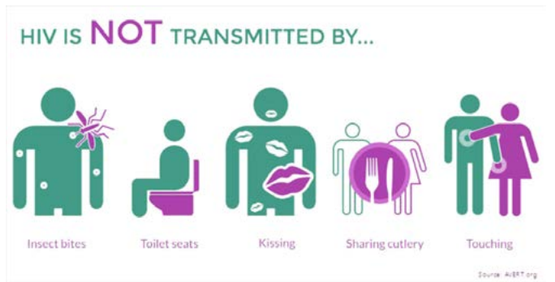
As the infection progressively weakens the immune system, a person can develop swollen lymph nodes, weight loss, fever, diarrhea and cough. Without treatment, severe illnesses could occur such as tuberculosis (TB), cryptococcal meningitis, severe bacterial infections and cancers such as lymphomas and Kaposi's sarcoma among others.[1]

What is the current status of antiretroviral therapy (ART)?

Despite the fact that there is no cure for HIV/AIDS, treatment that can halt HIV progression exists, actually antiretroviral drugs are used in the treatment and prevention of HIV infection. By mid-2017, 20.9 million people were receiving HIV antiretroviral therapy globally. While this number illustrates a formidable success in HIV treatment scale up, nearly half of all people in need are still waiting for treatment. In Lebanon, in the year 2017, the cumulative number of people receiving treatment reached 1304 with 186 new cases of People Living with HIV/AIDS (PLWHA) on ART; an increase of 16.6% compared to previous year 2016.[3-8]

Table 1: Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP).

	Pre-Exposure Prophylaxis (PrEP)	**Post-Exposure Prophylaxis (PEP).**
When is it taken?	Every day, before possible exposure	In emergency situations, within 72 hours of possible exposure and carried on for 28 days.
Who is it for?	People who don't have HIV and: • Have a sex partner with HIV • Share injection drug equipment	People who don't have HIV but may have been exposed: • During sex • At work through a needle stick • During a sexual assault
How effective it is?	Prep can reduce the risk of getting HIV from sex by 90% and from drug injections by 70%.	A proper administration can reduce the risk by over 80%



Is there a cure or a vaccine for HIV?

The world still lacks a cure or vaccine for HIV, however, with good and continued adherence to ART, the progression of HIV in the body can be slowed to a near standstill. In addition, counselling and psychosocial support, access to good nutrition, safe water and proper hygiene can also help an HIV-infected person maintain a high quality of a productive life. [3-4]

HIV in the MENA region : low prevalence, and a growing risk

Globally, HIV continues to be a major public health issue, in 2016 there were approximately 36.7 million people living with HIV along with 1.8 million new infections in 2016 compared to 3.4 new infections in 2001. Moreover, 1.0 Million HIV related deaths were recorded in 2016 compared to 2.3 million in 2005. 1 At a regional level, the Middle East and North Africa (MENA) region has the lowest HIV prevalence in the world (0.1%) in contrast to sub-Saharan Africa, which has the highest prevalence (7.1%). [5-6]

Despite its low prevalence, the MENA region is becoming an area of concern as it is one of only two world regions where HIV and AIDS related deaths are still on the rise. This is possibly due to the fact that the majority of people living with HIV are ignorant of their status. In addition to a very poor access to antiretroviral treatment (ART), with only 24% of those needing ART in the region having access - far below the international level of 53%. Moreover, the high levels of stigma and discrimination against people living with HIV remain a cardinal concern in this respect. [7]

What about Lebanon?

The HIV epidemic was introduced to Lebanon in 1984, with the 1st diagnosed and reported AIDS case, however, in 2016, 2206 HIV/AIDS cases were recorded till December, according to the National AIDS Control Program (NAP). Despite the rise in HIV cases in the region, Lebanon has remained at a plateau for the past 10 years, and no cases of death related to HIV were reported, largely due to better access to education and protective resources compared to its neighbors as well as universal access to treatment.

However, the climbing trend of the HIV/AIDS crisis is highlighted in the latest statistics done by NAP whereby 205 new cases were recorded in 2017, compared to 108 cases in 2016, in addition a concentrated epidemic is spotted among the heterosexual and (Men who have Sex with Men) MSM population as the percentage of transmission among heterosexuals increased from 12.1 in 2016 to 35.65 in 2017, and in MSM it increased from 47.7% in 2016 to 54.15% in 2017. [8]

It is also important to point out that 29% of MSM in Lebanon are non-Lebanese, besides the fact that More than 80% of the female sex workers were found to be non-Lebanese. [9]
About half the newly reported cases were in the advanced HIV infection stage implying that diagnosis of HIV infection in Lebanon occurs in the late stage of infection and, hence, the need to encourage early detection, and to promote early testing and counseling. [10]

In the fight against HIV, several parties are involved, whereby the Ministry of Public Health gratuitously provides the antiretroviral treatment to the Lebanese PLWHA, Syrian and Palestinian refugees. In addition, there are more than 110 voluntary counselling and testing

centers distributed on all Lebanese districts, mostly run by NGOs such as *Marsa, Helem, Dar El Amal, Oui pour la vie*.... Their role is vital in reaching the most stigmatized groups in our society and they offer free testing for HIV and other STDs. Moreover, the role played by Lebanese media in spreading awareness of HIV prevention, testing and treatment amongst individuals, especially the youth is of great impact.

Conclusion

The implementation of HIV prevention, diagnosis and treatment programs among key and vulnerable populations particularly MSM ,the prison population and the youth is a joint responsibility of governmental institutions, ministries and civil society, with the aim to reduce new HIV infections, give access to organized best quality care and antiretroviral therapy regardless of age, gender, sexual preference, religious beliefs , nationality or socio-economic status without any stigma or discrimination.

These intervention are grounded on new data emerging about HIV in Lebanon, taking into consideration the demographic changes in Lebanon caused mostly by the influx of refugees from Syria forming about 1/3 of the Lebanese inhabitants and placing an enormous strain on the health system.

As a final point, it is important to shed light on the discrimination HIV positive individuals face based on their health status. Hopefully, with education and awareness programs people diagnosed with HIV in Lebanon will no longer feel stigmatized. **Still, we must keep in mind that bringing hardships onto the HIV-positive community does nothing to stop the virus from spreading!**
These and other related issues form a part and parcel of the strategies of the National AIDS program developed during the past year.

References

1) World health organization fact sheet updated November 2017 http://www.who.int/features/qa/71/en/
2) National AIDS Program: Report on HIV/AIDS in Lebanon, Beirut: NAP, 2012. http://www.moph.gov.lb/Prevention/%20AIDS/Pages/Background.aspx
3) Ensoli, B., et al., Challenges in HIV Vaccine Research for Treatment and Prevention. Frontiers in Immunology, 2014. 5: p. 417.
4) Cihlar, T. and M. Fordyce, Current status and prospects of HIV treatment. Current Opinion in Virology, 2016. 18(Supplement C): p. 50-56.
5) Gökengin, D., et al., HIV/AIDS: trends in the Middle East and North Africa region. International Journal of Infectious Diseases, 2016. 44(Supplement C): p. 66-73.
6) Avert, HIV and AIDS in the Middle East & North Africa (MENA), 2017 https://www.avert.org/professionals/hiv-around-world/middle-east-north-africa-mena
7) UNAIDS (2017) 'Ending AIDS: Progress towards 90-90-90 targets'
8) National Aids Control Program, 2017 statistics, Lebanon.
9) HIV AIDS Response and Context in Lebanon in 2016 Contributions from Dr. Amjad Idries http://www.amjadidries.org/Projects/Ready/2016_HIV%20AIDS%20Response%20and%20Context%20in%20Lebanon.pdf
10)National AIDS Control Program in Lebanon, MOPH 2017. https://www.moph.gov.lb/en/Pages/2/4000/aids