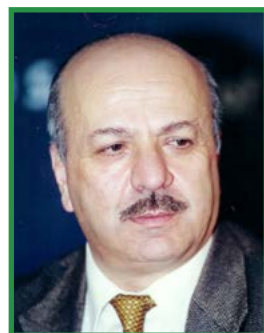


AIDS in Lebanon: An Update of a Chronic Infection Curbing Again



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Introduction

HIV/AIDS was detected and reported in Lebanon in 1985, soon after its recognition as a unique syndrome jointly by R. Gallo and L. Montaigner in 1981. Since then HIV/AIDS infection rate increased steadily in the first decade with most cases imported. Later on, HIV infection in people who never left the country was also reported. In the late eighties, the government of Lebanon recognized officially the severity and danger of this pandemic and with an assistance from the WHO, they established the National AIDS Program which led the fight against HIV/AIDS along with NGOs. They developed a series of strategic plans to limit the spread of the disease, promoting early testing and diagnosis, providing treatment and counselling, at the expense of the Ministry of Health, with the collaboration of the Lebanese AIDS Society, which was established by a group of experts in 1992, and other non-government organizations.

For the past two years, the national response to HIV/AIDS is being guided by the framework designated in the 2016-2020 National Strategic Plan (NSP) for HIV/AIDS which was meant to be a milestone in Lebanon's response to the HIV epidemic in this critical period of the Middle East, a turbulent region, a region at war with millions of migrants and refugees living in unhealthy conditions and forming almost one third of the Lebanese population (NAP reports

2018, Lebanon).

The NSP reflected the progress made in achieving a clearer understanding of the challenges posed by the epidemic and the increasing awareness and motivation of all the stakeholders towards the long-term vision of zero new HIV infections by 2030. It required the reaffirmation of the fact that all stakeholders should be united to reduce new infections and to create the appropriate environment for work, hand in hand, with the National AIDS Program. All these efforts will contribute to the global vision of an AIDS-free world by 2030. Advances in the field, particularly the management of HIV infection which has witnessed a lot of progress with the advent of new treatments, more efficient diagnostic tools for early detection, and more sensitive clinical markers for monitoring and follow up. Such advances have curbed the disease, decreased incidence and have transformed the course of this disease into a chronic illness (Jesson and Leroy, 2015)

Global Situation

The global strategy positions the health sector response to HIV as being critical to the achievement of universal health coverage - one of the key health targets of the Sustainable Development Goals. It promotes a people-centered approach, grounded in principles of human rights and health equity. It is also aligned with other relevant global health strategies and plans, including those for sexually transmitted infections (STI's), tuberculosis (TB), viral hepatitis, sexual and reproductive health, maternal and child health, blood safety, non-communicable diseases and integrated people-centered health services. This plan has been supported by the extraordinary efforts of many countries, recognizing that countries and communities are central to the response.

In brief, globally the enormous investments in the HIV response over the past 3 decades are paying off. Large declines in new HIV infections and HIV-related deaths in the past decade attest to the commitment, resources and innovations that have been already directed at the global

HIV epidemic. This decrease is largely due to the increased access to antiretroviral therapy (ART). During the year 2017, the numbers also decreased further to 1.8 million new infections with 1.6 million adults and 180 thousand children < 15 years. Moreover, the number of deaths has also decreased to less than a million (0.94 million), with less children than before, almost 110 thousand (Figures 1 and 2).

The decline becomes more significant if we compare to 2010 numbers: a total decrease of 18% in general adults and 47% less in children. Most of the cases are in Africa, almost 26 million from a total of 36.9 million. (WHO Reports)

HIV in LEBANON

Lebanon is a 10452 SqKm country with an estimated 6 million inhabitants (among which 1.8 are immigrants) located on the eastern shores of the Mediterranean Sea and to the western part of Asia. It is the country with the highest density of persons per Km2 (600 inhabitants/Km2). Lebanon is at crossroads between East and West; this unique location of Lebanon has dictated its rich cultural identity of religious and ethnic diversity. Consequently, for the past 7 years, an influx of about 1.8million migrants/refugees, mostly Syrians, flooded Lebanon, most of them live in camps all over the country with more concentration in the North, the South and the Bekaa. They live under harsh health and social conditions which could lead to risky lifestyle and unsafe sexual practices, conducive to HIV transmission among other diseases.

Lebanon reported its first case of HIV in 1985 and by 2018, the cumulative number of cases reported of HIV is 2366 an increase of 473 cases over 2015. Again, the number of new cases which was almost steady, in the previous years, around 100 per year, went up to 205 in 2017 and then curbed again in 2018 to 160 cases (Table 1). The reported HIV cases are 94.4% males and 5.6% females, a clear increase in the male cases constituting the majority in the last few years (Figure 3). The cases are mostly between ages of 15 to 49 (90%) (figures 4 and 5), the mode of transmission is mostly sexual (98.8%) (Figures 6,7) and more with homosexuals (76.9%) (Figures 8,9). However, there was plateauing of reported cases between in the past 6-7 years to a yearly average of almost 100 cases (Table 1). It is a low prevalence country (less than 0.1%). In 1989, Lebanon recognized officially that HIV is a public

health threat and established a National AIDS Program (NAP) aiming to lead the concerted efforts of the public and private sectors in the fight against the disease. While many countries in the region were denying its presence for different reasons, Lebanon developed a series of national action plans based on evidence gathered from a series of studies covering the general population as well as high-risk groups. The adopted strategies made the anti-retroviral drugs universally available and accessible. It is thus likely that the HIV/AIDS disease is curbing in Lebanon and the turning point in dealing with such a pandemic is near. Would the influx of refugees change this trend? In the last two years the incidence has increased as reported to the NAP, 209 cases in 2017.

Discussion

While the first cases of HIV/AIDS were diagnosed among emigrant Lebanese men visiting or returning home, more recent data indicate that local transmission and spread of the disease are taking place, becoming a significant, if not the prevalent, mode of transmission in the country (82.3% in 2014 and 92.7% in 2015).

About half the newly reported cases were in the AIDS 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. The new statistics in 2014 have shown a progress at detection level of HIV. Raising questions concerning the status and efficacy of HIV/AIDS diagnosis and reporting system in Lebanon and pointing to the need to organize a truly effective system/network for early testing and detection of the infection is being developed.

Sexual intercourse remains the main route of HIV transmission in Lebanon, accounting for 90% in 2013, 81.4% in 2015 and 98.8% in 2018 (Figures 6,7) of total infections. Of these transmissions, 44.6 %, 36.7%, 34.5% and 76.9% are transmission through homosexual relationships, in 2013, 2014, 2015 and 2018, respectively (Figures 8,9). Testing of transfused blood for HIV has been mandatory since 1990, and since 2009 there was only one new case of HIV infection reported as due to transfusion and zero percent in 2015 and still zero in 2018 (Figure 6). The data in figure 4 and 5 portray a steadily increasing trend of newly reported infections, particularly amongst the young population aged 15-29 (31.8%) in 2014 and 43.81% in 2018, mostly by men having sex with men.

Moreover, the data reveal that an average of 35.33% (2014), 38.1% (2015) and 46.5% in 2018 of all documented HIV/AIDS cases in Lebanon fall within the 31-50 age group (Figure 5). This finding suggests, and clearly needs to be substantiated with prolonged prospective studies on HIV/AIDS transmission, a delay in detection which should be improved and scaled up through targeted interventions.

Analysis of the gender distribution of HIV/AIDS cases over 10 years (2008-2018) shows a trend of low rate in the female reported cases compared to males from 17.7% in 2009 to 8.3% in 2014, 14.2% in 2015 and 5.6% in 2018 (Figures 3, 10). Such higher prevalence of infection amongst males prompted a nationwide study of MSM that was completed, and results disclosed by Heimer R et al. in 2017 and another study published lately by Mukhbat et al. 2016. This study estimated the number of MSM's to be on the rise, in particular, among migrants and refugees.

The above figures offer evidence towards a decreasing female influence on the epidemiology of HIV/AIDS, in particular with the zero perinatal transmission in the past few years and the increase of homosexuality influence as well as the influx of higher migrants from nearby countries.

Conclusion

The present strategic plan took into consideration the real risk of HIV infection emanating from the influx of migrants living all over Lebanon. It encouraged through the implementation of multiple activities for more HIV testing and motivated migrants for early testing, diagnosis and offered free management through a special grant earmarked specifically for migrants.

The numbers presented in the table about the progress of the HIV-infection in Lebanon, for the past few years, after the influx of Iraqis first and especially Syrians later, showed that the average yearly HIV rate of infection which was around a hundred per year taking HIV medications, for almost 10 years until 2016, has more than doubled, in 2017 to 209 and then curved down to 160 in 2018.

I believe that the major element of increase and then decrease was the free management and the anonymous approach to deal with such patients who are mostly homosexuals and could be easily stigmatized by the society.

Last but not least, it is believed that through the

implemented NSP plan, Lebanon will become in 2020 a country where new HIV infections will be reduced, and every person living with HIV will have access to organized best quality care and antiretroviral therapy regardless of age, gender, sexual preference, religious belonging, nationality or socio-economic status without any stigma or discrimination. It will be then, as a country, able to reach the ultimate goal of zero HIV infection by 2030.

In brief, provisions for free management to HIV infected people will very likely lead us to the 2030 target of zero HIV infection.

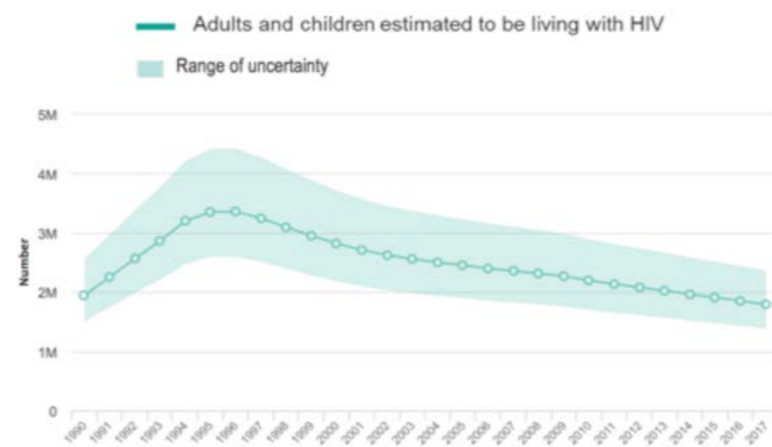


Figure 1- Record of new cases of AIDS infected adults and children, 1990-2017

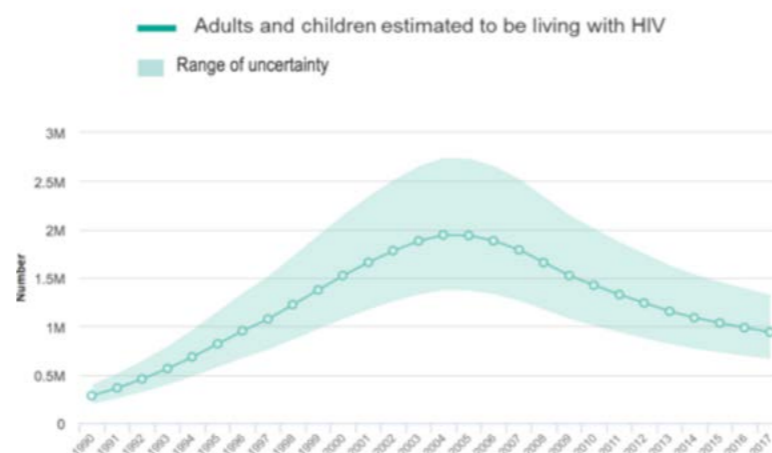


Figure 2- Approximate number of adult and children deaths, 1990-2017

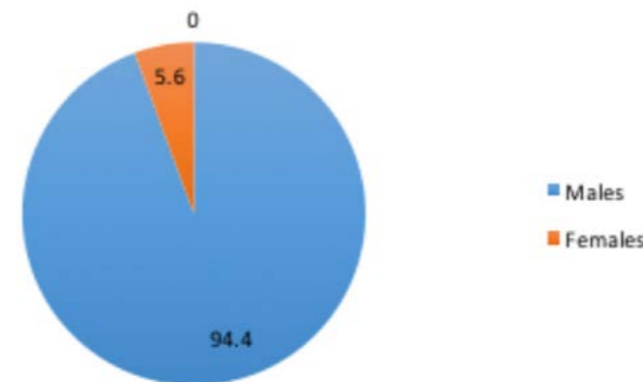


Figure 3- Distribution of cases amongst gender

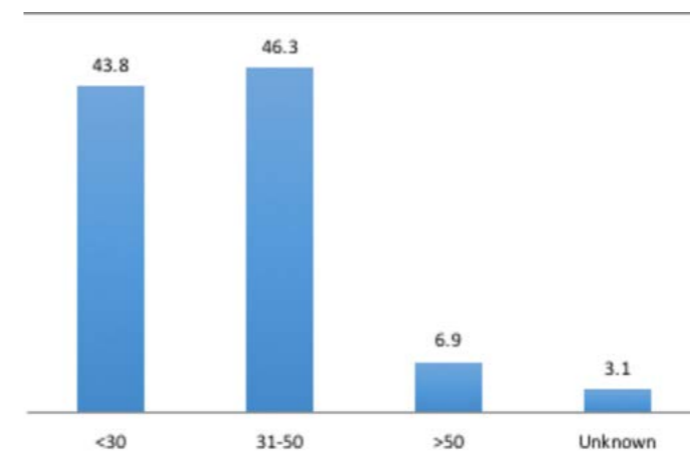


Figure 4 - Distribution of cases according to age groups in Lebanon

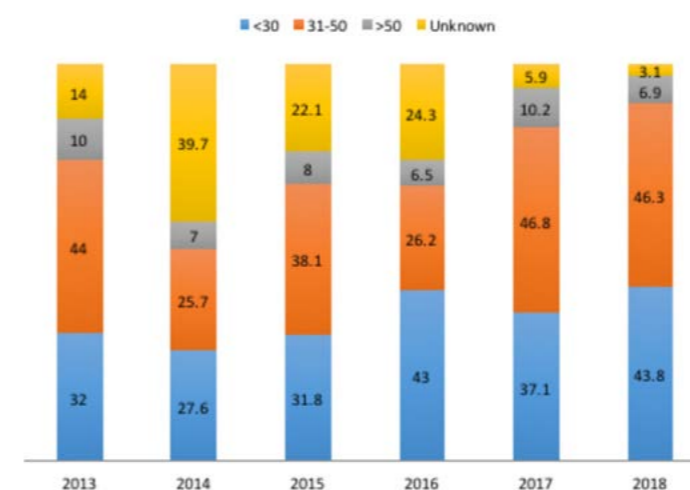


Figure 5- Evolution of disease during the last 6 years, distribution according to age groups

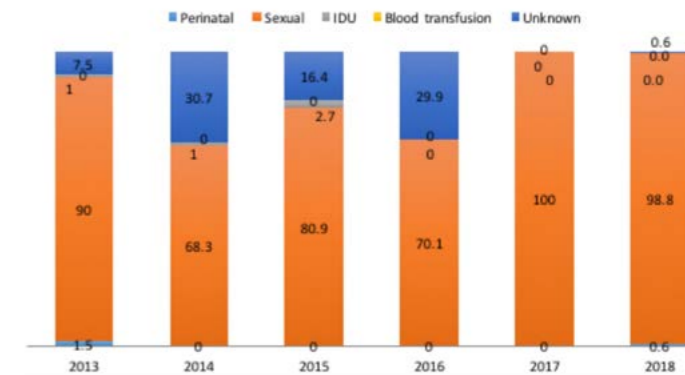


Figure 6- Evolution of Disease during the last 6 years, distribution according to transmission methods

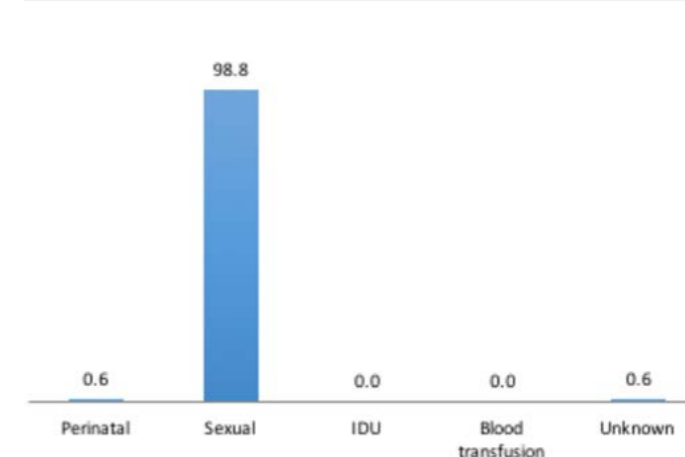


Figure 7 - Distribution of cases in Lebanon, according to transmission methods

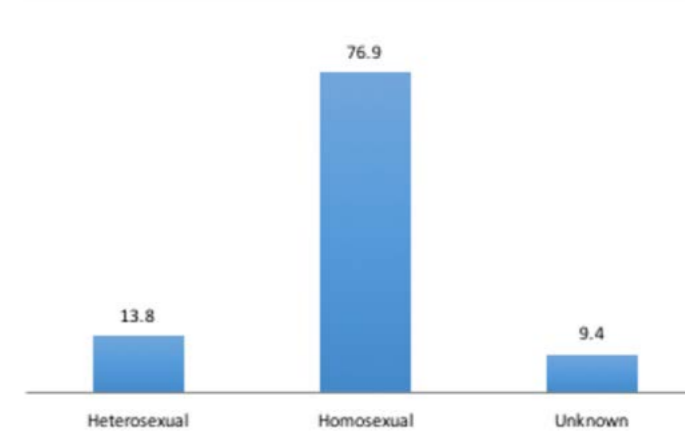


Figure 8 - Distribution of cases in Lebanon, according to sexual orientation

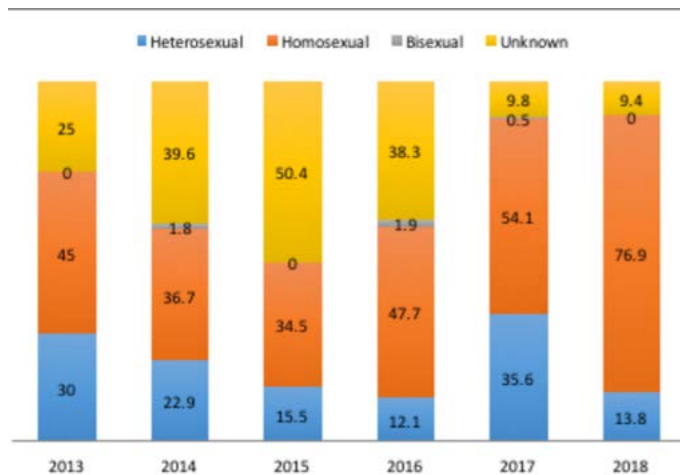


Figure 9 - Evolution of disease during the last 6 years, distribution according to sexual orientation

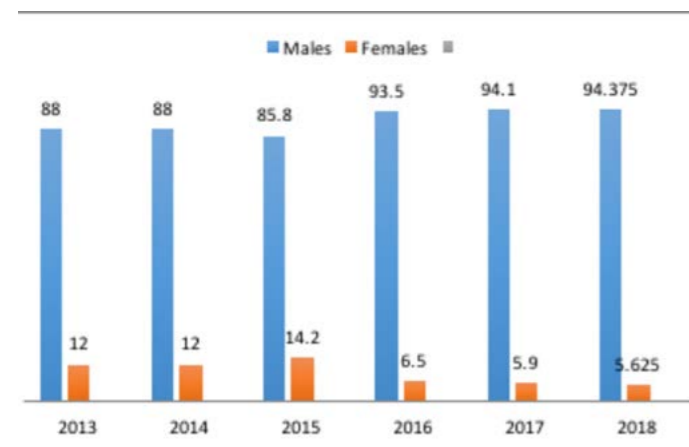


Figure 10 - Evolution of disease during the last six years, according to gender

Year	Reported cases per year	Cumulative number
2013	119	1671
2014	109	1780
2015	113	1893
2016	108	2001
2017	205	2206
2018	160	2366

Table 1- Evolution of disease during the last 6 years

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