



HIV

Objectives

- Describe the current estimates of HIV / AIDS infection
- Understand how people get infected with HIV
- Appreciate the features which characterize the pandemic in the Eastern Mediterranean Region
- Differentiate what could work best, as far as prevention & control efforts are concerned, in our Region

Resources slides and Doctors notes

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[Important](#) | [Notes](#) | [Extra](#)

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HIV/AIDS

What is AIDS?

Acquired Immuno-Deficiency Syndrome (AIDS) is a severe life-threatening clinical condition, This syndrome represents the late stage of infection with the Human Immuno-Deficiency Virus (HIV), which often results in progressive damage of the immune and other organ systems, especially the central nervous system (CNS).

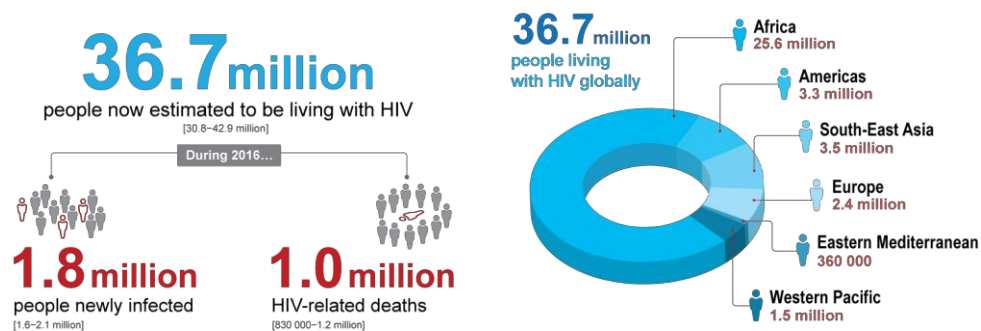
HIV/AIDS Pandemic: overall features

- Pandemic: all continents, all nations
- HIV has been isolated from ALL body fluids
- There are only three modes of transmission (Sexual 90%, Body fluids 5%, Mother-to-child 4%), **body fluids it has higher transmission efficiency, however the sexual transmission is the predominant rout of transmission of HIV\AIDs.**
- Incubation & communicability: long
- Asymptomatic infected (incubating carriers) are capable of transmission of the infection
- Impacts of infection: health, social, productivity, life expectancy, economic, overall development

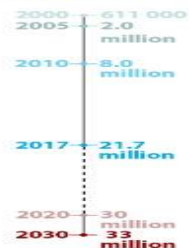
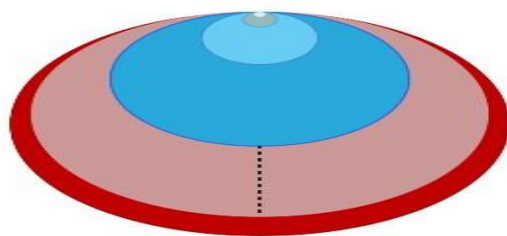
HIV/AIDS Infection cycle

- **Agent:** HIV retrovirus
- **Reservoir:** humans (cases, carriers)
- **Communicability increases with:** STI, TB, addiction, repeated contaminated injections / transfusions, sexual promiscuity (frequency, multiple partners)
- **Portal(s) of outlet:** semen, vaginal secretions, blood, skin... **all the fluids of the body have shown HIV even saliva ... The other partner must have broken epithelium to get the virus.**

Epidemiology

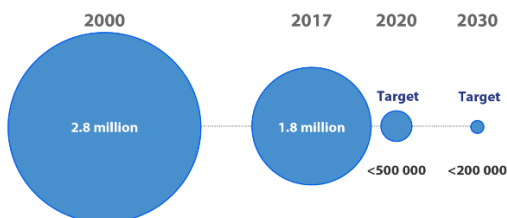


Number of people receiving antiretroviral treatment



Source: UNAIDS/WHO estimates

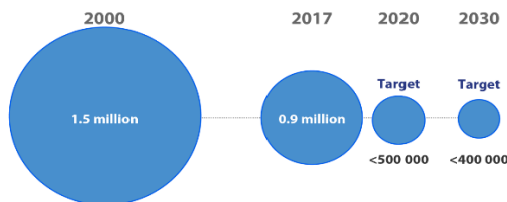
Number of people newly infected with HIV



Source: UNAIDS/WHO estimates

The number of newly affected people with HIV will decrease because they are going to increase the anti-retroviral treatment access and delivery ... so, they are hoping and aiming that all HIV infected people will have access to treatment by 2030

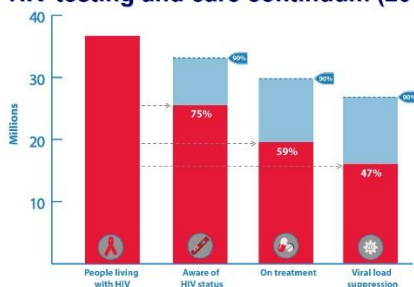
Number of HIV-related deaths



Source: UNAIDS/WHO estimates

The death of HIV decline, but the rates of infection increase, that mean increase the burden of health care cost

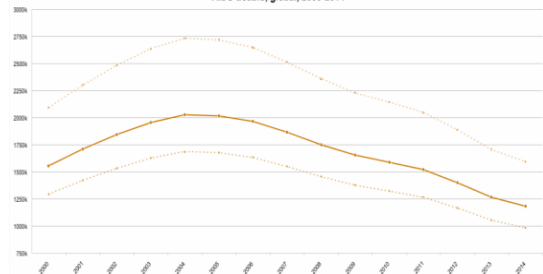
HIV testing and care continuum (2017)



Source: UNAIDS/WHO estimates

Here the dilemma is that the people who infected with HIV they do not know about their condition. Why? Because they do not have access to the testing and treatment & anti-retroviral is one of the expensive treatments in the world. So, there are saying that they are hoping to increase the awareness of HIV status by 90% and that will increase number of people who receive the treatment also the viral load suppression will increase.


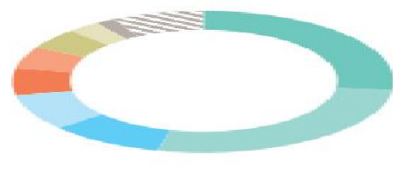

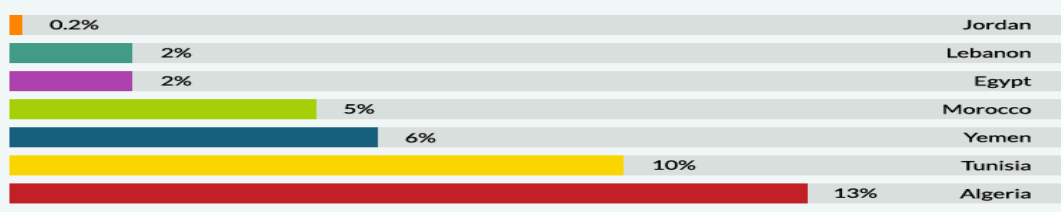
AIDS deaths, global, 2000-2014



There is a decrease in the last years because of the awareness regarding the prevention. Also because of reporting and vaccination.

HIV/AIDS Pandemic: EMR features

- **Generalized epidemic** (> 1 %): in Djibouti, Sudan, some parts of Somalia
- **Concentrated epidemic** (> 5 %): among IDU in Iran, Libya, Pakistan
- **Age-gender distribution:** predominantly affecting adult (91 %) males (71 %)
- Modes of transmissions: mainly heterosexual (77 %); IDU (11 %); blood transfusion (5 %), mother to child (2 %)

Graphs	Comments																
	<p>Middle East & North Africa (2016)</p> <p>230,000 people living with HIV</p> <p>0.1% adult HIV prevalence</p> <p>21,000 new HIV infections</p> <p>12,000 AIDS-related deaths</p> <p>37% know their status</p> <p>17% on antiretroviral treatment</p> <p>11% virally suppressed</p> <p><small>Source: UNAIDS Prevention Gap Report 2016</small></p>																
 <p>DISTRIBUTION OF NEW HIV INFECTIONS, BY COUNTRY, MIDDLE EAST AND NORTH AFRICA, 2016</p> <p><small>Source: UNAIDS 2017 estimates.</small></p>	<p>Legend for Distribution of New HIV Infections:</p> <ul style="list-style-type: none"> Iran (Islamic Republic of) - 28% Sudan - 9% Somalia - 18% Egypt - 4% Yemen - 6% Morocco - 5% Algeria - 10% Djibouti - 13% Tunisia - 2% Rest of the region - 2% 																
<p>DISTRIBUTION OF NEW HIV INFECTIONS AMONG POPULATION GROUPS BY REGION</p> <p>2014 <small>Source: UNAIDS special analysis, 2016</small></p> <p>Middle East and North Africa</p>  <ul style="list-style-type: none"> Sex workers - 9% People who inject drugs - 28% Gay men and other men who have sex with men - 18% Clients of sex workers and other sexual partners of key populations - 41% Rest of population - 4% 	<p>So, its more common in the clients of sex workers than in people who inject drugs.</p>																
<p>HIV prevalence among MSM from selected countries in the Middle East and North Africa, 2009-2013</p>  <table border="1"> <thead> <tr> <th>Country</th> <th>HIV Prevalence (%)</th> </tr> </thead> <tbody> <tr> <td>Jordan</td> <td>0.2%</td> </tr> <tr> <td>Lebanon</td> <td>2%</td> </tr> <tr> <td>Egypt</td> <td>2%</td> </tr> <tr> <td>Morocco</td> <td>5%</td> </tr> <tr> <td>Yemen</td> <td>6%</td> </tr> <tr> <td>Tunisia</td> <td>10%</td> </tr> <tr> <td>Algeria</td> <td>13%</td> </tr> </tbody> </table> <p><small>Source: Global AIDS Response Progress Reporting 2014.</small></p>		Country	HIV Prevalence (%)	Jordan	0.2%	Lebanon	2%	Egypt	2%	Morocco	5%	Yemen	6%	Tunisia	10%	Algeria	13%
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HIV / AIDS Prevention & Control

- **Globally:** UNAIDS (includes 10 UN agencies); IHRA (International Harm Reduction Association)
- **Nationally:** MoH- National AIDS Program (NAP),
- **Multi-sectoral:** National AIDS Committee (NAC) including: health, education, higher education, information, Islamic Affairs, Sports & Youth Welfare, planning, finance, labor, defense, interior
- **Non-governmental (civil service) organizations**

Prevention in the EMR

- Lebanon, efforts to **prevent the mother-to-child transmission of HIV** have been undermined by a lack of testing services in combination with expensive referral systems, fears around testing, as well as a lack of awareness and stigma
- HIV testing has been offered to women attending antenatal clinics in Oman since 2010 and has an acceptance rate of 99%. Along with the United Arab Emirates and Morocco, **Oman has one of the highest testing coverages for pregnant women in the region.**
- Iran's **harm reduction programs** have been recognized as good practice in preventing the transmission of HIV among people who inject drugs
- the government launched a campaign **distributing clean needles and syringes in pharmacies** across the country
- In Morocco, in 2012, a **preventing mother-to-child transmission (PMTCT)** program. It includes efforts to engage private health providers to offer HIV testing and counselling (HTC) and HIV awareness for pregnant women. basic health facilities had been established to provide HTC services for pregnant women
- **The most effective method to prevent sexual transmission in Mediterranean region are mutual fidelity and condom use.**

Barriers to HIV prevention programs in the Middle East and North Africa

- Cultural and social barriers
- Political barriers
- Legal barriers

General recommendations for HIV/AIDS prevention

- ♦ **Primary:** **Health education efforts HIV/AIDS (which help in reducing the incidence),** preventing transmission
- ♦ **Secondary:** health education, counseling, health care, support (avoid stigmatization **this is the main thing that we are struggling in the middle east,** discrimination), protect society (public health measures)
- ♦ **Tertiary:** care for the terminally ill, managing complications and associated conditions
- ♦ **Vulnerable groups:** youngsters & women (in general) but IDU, prisoners, TB & STI patients, homosexuals, prostitutes (in specific)
- ♦ **Other groups:** migrant workers, refugees and displaced persons, transport workers, & tourists

- ◆ **Preventions of sexual transmission:**
 1. **Global recommendations:**
abstinence, condom use

 2. **EMR Recommendations:**
fostering religion, health education (curricula, information, skills, behavior) dealing with the problem as a social/health issue, use of mass media (advertisements, plays, dialogues)
- ◆ **Prevention of blood transmission:**
 1. Safety measures & screening at every stage
 2. Voluntary un-paid donors only
 3. Transfusion, only when needed
 4. Careful history-taking and physical examination
- ◆ **Prevention of perinatal transmission:**
 1. Pre-marital counseling
 2. Infected women are advised not to conceive
 3. Use of AZT (reduces transmission risk by 2/3)
 4. In general, breast feeding should be continued
 5. Case-management: compulsory notification



THE END



