2017 - HIV-AIDS reality in Brazil

Eduardo Ditzel, MD MSc
Infectious Diseases Division of Hospital Nossa Senhora das Graças. Curitiba, Brazil
Contact: eduardoditzel@gmail.com

Introduction

Since the creation of the Brazilian Constitution in late 80's, parallel to the remodeling of the health system to offer universal access to general health care to the population and the creation of the Law 9.313 in 1996, Brazil has offered free universal antiretroviral (ARV) access and HIV care to all HIV infected individuals[1]. Brazil is now facing one of the biggest economic and political crisis in its history, what directly impacts the Brazilian HIV epidemic response. Efforts have been made to improve the purchasing power of the population through tax benefits in the last decade while little investment has been made to improve HIV prevention, detection, education and care[1]. As a result of the influence of the conservative and religious section of the Brazilian politicians, campaigns on HIV prevention directed to key populations, like men who have sex with men (MSM) and sex workers, have been censored and even a bill on criminalizing HIV transmission has been unarchived[1].

HIV data come from the mandatory HIV reporting system (SINAM) implemented only in 2007 and from other three already existing different systems of data recovery[2]. Although HIV infection reporting is mandatory since February 2016 - AIDS cases reporting is mandatory since 1980s -, under-reporting is still a challenge to understand the Brazilian HIV epidemics[2]. Considering that over the years the reporting system has been improved, that ARVs are only offered together with HIV reporting and that Brazil has adopted the *test and treat* strategy for HIV prevention and care, data from 2007 is the more reliable but still too small to offer robust information on the real trend of the Brazilian HIV epidemics[2].

Epidemics

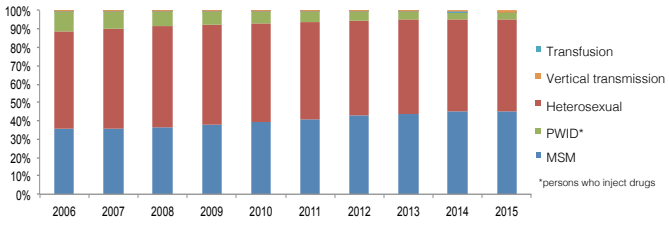
AIDS cases – mandatory reporting since 1980s

From 1980 to 2016, there has been 842.710 AIDS cases reported, around 41.100 cases per year in the last four years[2]. The great majority of AIDS cases reported in these last 36 years is concentrated in the Southern and Southwestern regions of Brazil (20,1% and 53% respectively)[2], the most populated regions of the country. AIDS detection has been stable over the last decade with mean 20,7 cases per 100.000 inhabitants[2].

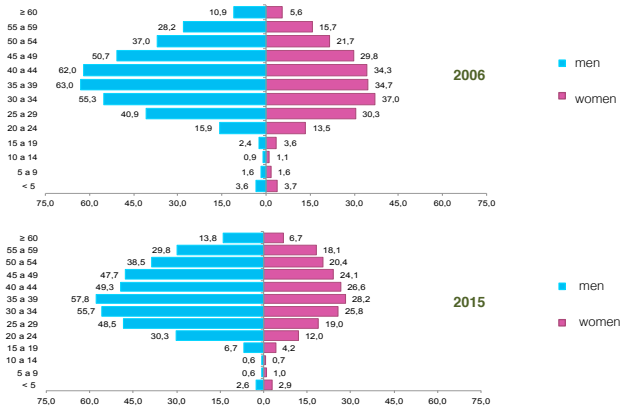
HIV cases – reporting started in 2007 but mandatory since February 2016

From 2007 to June 2016, 136.945 HIV cases were reported in Brazil, of which 32.321 only in 2015[2]. Sex distribution is 2,4 men to 1 woman. Considering HIV cases among men over 13 years of age from 2007 to 2015, 50,4% of cases were among (self reported) gay men, 36,8% among (self reported) heterosexuals and 9% among (self reported) bisexuals, what makes 59,4% of cases among MSM[2]. From 2000 to June 2016, 99.804 cases were reported in pregnancy, of which 7.901 only in 2015[2]. HIV detection in pregnancy has increased 28,6% from 2,1 cases per 1.000 live births in 2000 to 2,7 in 2015[2]. Southern region is the most affected in pregnancy with 5,9 cases per 1.000 live births in 2015[2].

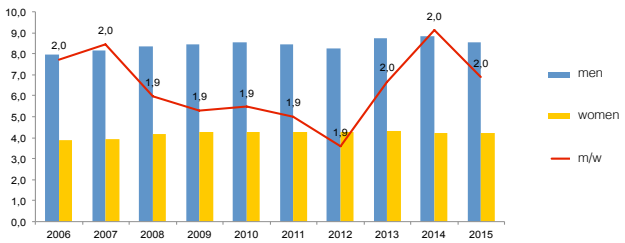
AIDS cases in men over 13 years of age – according to risk group and year of diagnosis[2]



AIDS detection rates per 100.000 inhabitants – according to age group and sex[2]



AIDS mortality rates per 100.000 inhabitants – according to sex and year[2]



Care

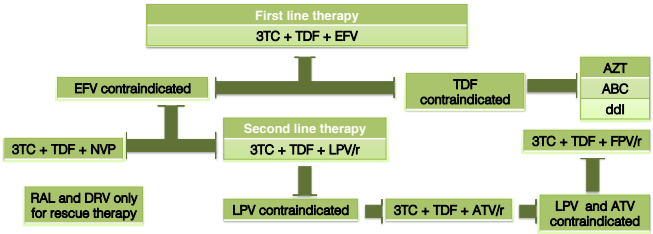
After HIV diagnosis, individuals should be linked to care either to the public or the private health care system, in order to consult a physician, get laboratory tests and ARV prescription. On the other hand, ARVs are traditionally and universally offered only at the public health care system, independently from what health system the patient comes from. ARVs are distributed over the country through a centralized policy, where the Health Ministry offers the drugs accordingly to each region's needs. Individuals can take the ARVs exclusively at public specialized pharmacies.

Although primary HIV resistance in Brazil is estimated in over 10% or even higher, according to the different regions of the country[3], drug resistance testing before starting ARVs is recommended but not universally available. If the resistance test is mandatory as drug resistant HIV transmission is suspected, physicians should ask for this specific test, should document it's need and wait for the test approval. Sometimes this process postpone the ARV initiation – a similar process is necessary in the private health system. Most commonly ARVs are prescribed without previous resistance testing and only HIV viral load (VL) decrease is used to evaluate therapy effectiveness.

Considering limited funding for drug acquisition in Brazil, physicians are not completely free to prescribe the ARVs they judge the best for the HIV infected individuals, but have to follow strictly a protocol[4,5] on ARV prescription, as follows:

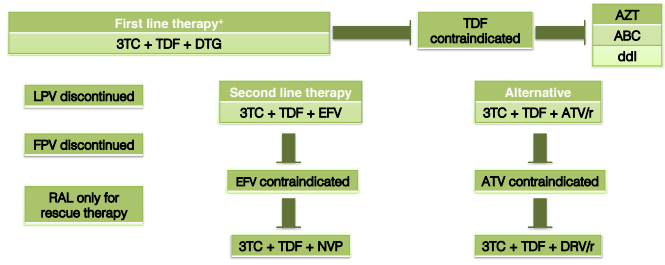
1. Protocol on HIV care and ARV prescription 2013[4]

	ARV initiation
Symptomatic	yes
Asymptomatic with CD4≤500 cells/mm³	yes
Asymptomatic with CD4>500 cells/mm³	Only if HBV coinfection (when HVB treatment is necessary), HCV coinfection, AIDS related cancers, cardiovascular disease or VL>100.000 copies
No CD4 cell count	yes
Pregnancy	yes



2. Protocol on HIV care and ARV prescription 2017[5]*

	ARV initiation
Symptomatic	yes
Asymptomatic with CD4≤500 cells/mm³	yes
Asymptomatic with CD4>500 cells/mm³	yes
No CD4 cell count	yes
Pregnancy	yes



*Only for new diagnosis starting ARV after February 2017. For those already on therapy, DTG is only available for rescue therapy.

*Official data from 2015. Latest actualizations in February 2017 still officially unpublished.

References

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