**Introduction:** As a consequence of the progressive increase in the number of AIDS cases in women in Brazil, Vertical Transmission (VT) has assumed great epidemiological importance. This way of transmission has become a major challenge for Public Health, demanding new surveillance strategies, mainly in order to guarantee HIV testing in prenatal care. Early diagnosis makes it possible to adopt prophylactic measures to avoid infection. The probability of transmission can reach 25.5% without any intervention, but preventive interventions can reduce to levels between 0% and 2%. The objective of this study was to evaluate the efficacy of surveillance actions in the early diagnosis of HIV in pregnant women followed in Primary Care in Ribeirão Preto and the frequency of HIV infection in these pregnant women from 2007 to 2015.

**Methods** In Ribeirão Preto the HIV test is offered to all women as soon as the pregnancy is confirmed in the first care with the nurse; and it is repeated in the second and third trimesters of gestation. The Public Laboratory performs HIV testing on all pregnant women followed in Primary Care according to the Guidelines of the Technical Manual for the Diagnosis of HIV Infection established by Health Ministry. The Lab reports to the STD/AIDS Program for all REAGENT tests by email. The Program contacts the Health Unit where the pregnant is being followed. Afterwards they are referred to a specialised Health Unit in which they are monitored so that all the prophylactic measures are taken in time to avoid VT. The results were analysed through a retrospective study, using data from Information System for Notifiable Diseases (SINAN), Information System for Live Births (SINASC) and Information System of the Public Laboratory. All pregnant women attended between 2007 and 2015 were selected.

**Results** During the study period, 69,827 children from mothers residing in Ribeirão Preto were born; 43,856 (62.8%) pregnant women were followed in Prenatal Care in a Public Health Unit and tested for HIV in the Public Laboratory. Among them, 103 (0.23%) women were infected with HIV. In the same period, 265 HIV positive pregnant women were notified on SINAN. The pregnant women who are already known to be HIV positive are directly referred to a specialised Public Health Unit. Five children under four years old HIV Positive were notified on SINAN: one child was born in another municipality, another child was born in the Private Health System and for the other three children, the mothers didn’t look for prenatal care early in pregnancy.

**Conclusion** Early diagnosis, surveillance actions and monitoring of pregnant women in prenatal care in the Public Health System are effective in reducing VT. There is a direct communication between all the areas involved; an immediate exchange of information between the laboratory that performs the diagnosis and the assistance in the prenatal care. However, the major challenges are to seek and insert all pregnant women for early prenatal care in order to promote the monitoring of those who are HIV positive.

**Introduction:** Controlling the epidemic by increasing access to care and suppressing viremia with adequate treatment is a central instrument in the UNAIDS and Brazilian strategy plan. Monitoring the implementation of the test and treatment program is important to adjust the strategy to the different real world scenarios.

**Methods** We evaluated the outcome of 239 patients newly diagnosed HIV infections consecutively recruited from January 2011 to February 2015. Response to antiretroviral therapy (ART), CD4 (BD, USA) and viral load (Abbott, USA) were evaluated prospectively. Continuous variables as median and 25th-75th percentiles (IQR).

**Results** Most patients were (194/239 81.2%) male, 134/194 (69%) men who have sex with men, 109/204 (46%) white, age 32 (25-41), with disease staging (CDC2014) Zero (6.3%), 1 (33.1%), 2 (31.4%) e 3 (29.3%), with CD4 388 cells/mm³ (205-616) and viral load log10 4.55 (3.99-5.12). Follow-up information was available to 200/239 (83.7%), with 39 lost to follow-up due to: transferred without information 10 (4.18%), abandoned 20 (8.4%) and death 9 (3.8%). Treatment was prescribed to 212/239 (88.7%), with 6 deaths before initiating ART, 21 refusing treatment or loss to follow-up. Among 212 treated, at week 24, 171/212 (80.7%) had viral load log10<3 (<1000 copies/mL, WHO suppression target) and 79%<200 copies/mL (DHHS suppression target). If only cases with information was considered (n=190), 90% and 89% (WHO/DHHS criteria, respectively). In the last observation, after a median follow-up of 127 weeks (91-178), viral suppression was 83.7% and 80.3% (WHO/DHHS) on all 239 cases and 92.5% and 89% among treated cases. Most (69%) had a CD4 >500 cells/mm³, 71.6% if only treated were considered.

**Conclusion** Newly diagnosed patient at public health service approach the viral suppression target, showing the feasibility of this goal. The high mortality after diagnostic, especially before treatment, warrants to the need to improve the identification and incorporation of this subgroup with advance disease.

**Introduction:** The study aimed to identify the factors associated with condom use during the last sexual intercourse.

**Methods** A population-based survey with youths aged 15–24, in São Paulo. The participants answered a questionnaire including knowledge and sexual behavioural data.

**Results** for 821 men and women the condom use during the last sexual intercourse was associated with: never having been married [adjusted prevalence ratio (PRadj): 1.54 among men; 1.26 among women], having used a condom in the sexual
onset (PR_adj:1.23 among men; 1.54 among women), receiving condoms free of charge (PR_adj:1.39 among men; 1.37 among women); besides, among men: casual sexual partner in the previous year (PR_adj:1.24) and same-sex sexual partner (PR_adj:1.23); among women with the sexual onset after 15yo (PR_adj:1.25). HIV-testing has displayed a negative association for women (PR_adj: 0.72).

Conclusion The condom is widely known, there is a pattern of it use during the first and last sexual intercourse; free condoms are important to improve its use by the youths, and people use condom as a risk management strategy. Condom as prevention strategy is still useful. After these results, the strategy of prevention was adopted as a public policy in the city of Sao Paulo: large condom dispensers were allocated in the 28 urban bus terminals, where 6 million people pass around daily and by the end of 2016, 80 million free condoms will be distributed.

TRENDS IN ADULT CHLAMYDIA AND GONORRHOEA PREVALENCE, INCIDENCE AND URETHRAL DISCHARGE CASE REPORTING IN MOROCCO OVER 1995–2015 – ESTIMATES USING THE SPECTRUM-STI MODEL

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Abstracts

Introduction Evolving health priorities and resource constraints mean that countries require data on trends in sexually transmitted infections (STI) burden, to inform program planning and resource allocation.

Methods The Spectrum modelling tool estimated prevalence and incidence of gonorrhoea and chlamydia in Morocco’s 15–49 year-old population, based on prevalence data adjusted for diagnostic test performance, urban/rural and male/female differences, and missing high-risk populations, and weighted by coverage and representativeness.

Results Gonorrhoea prevalence was estimated at 0.37% (95% confidence interval, 0.14%–1.00%) in women and 0.32% (0.12%–0.87%) in men in 2015; chlamydia prevalences were 3.8% (2.1%–6.4%) and 3.0% (1.7%–5.1%). Corresponding numbers of new cases in 15–49 year-old women and men in 2015 were 79,598 (23,918–256,206) and 112,013 (28,700–307,433) for gonorrhoea, and 291,908 (161,064–524,270) and 314,032 (186,076–559,133) for chlamydia. Gonorrhoea and chlamydia prevalence had declined by 41% and 27%, respectively, over 1995–2015. Prevalence declines probably related to improved STI treatment coverage, and decreasing risk behaviours. Reporting completeness among treated urethral discharge (UD) cases was estimated at 46%–77% in 2015. Clinically reported UD cases corresponded to 13% of all (symptomatic and asymptomatic) gonorrhoea and chlamydia cases.

Conclusion STI declines and improvements in treatment coverage are consistent with Morocco’s introduction of syndromic management in 2000, scale-up of prevention interventions, and declining HIV incidence after 2003. While gonorrhoea is four-fold more common as cause of clinical UD cases than chlamydia, Morocco continues to suffer a large, untreated burden of chlamydia. Reliable monitoring of both STIs requires new periodic surveys and/or novel forms of affordable surveillance beyond high-risk populations.


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Introduction The World Health Organisation and many countries have set targets to reduce rates of syphilis and eliminate congenital syphilis. National trends in syphilis prevalence and incidence, however, are uncertain. We used the Spectrum-STI model to estimate prevalence trends of active syphilis in adult women, for countries with ≥3 data points post-1999 including ≥1 from year 2009 or later.

Methods Prevalence data were adjusted for diagnostic test performance, and for the contribution of high-risk populations under-represented in surveys. National trends were estimated by logistic regression, weighting each data point by its national coverage. Estimates for 117 countries were aggregated to regional totals, weighting each country by adult population size, and imputing for countries without a trend estimate using regional averages.

Results At January 2017, 1056 data points had been identified, between 1977–2016 (median 2009), covering 137 million tests (132 million in routine ANC screening, 5.3 million in ANC surveys; 0.79 million from non-ANC general adult population surveys), of which 1.36 million found active infection. In provisional estimates, prevalence was highest in sub-Saharan Africa and lowest in Europe and the Middle East and North Africa (MENA). Prevalence declined over 2002–2012 in all regions, with strongest proportional decline in MENA (≥1% to <0.1%) and largest absolute decline in Africa (≥3% to 1%–1.8%). Trends over 2012–2016 remain to be confirmed with new data, including general population HIV and syphilis surveys conducted over 2015–2018 in some African countries.

Conclusion Spectrum-STI is a useful tool to interpret syphilis data in a systematic manner, and evaluate time trends in national adult syphilis prevalence; however some high-STI countries lack recent data from ANC or any other general populations. These first standardised country estimates suggests that syphilis declines need to accelerate in most countries, if by 2021 they are to meet impact targets of the global STI control strategy and eliminate congenital syphilis.