

Antiretroviral Treatment in the Spotlight: A Public Health Analysis in Latin America and the Caribbean

TRINIDAD AND TOBAGO

Development, HIV epidemic, and response indicators

Human Development Index 2009: Trinidad and Tobago/LAC	0.755/0.72
Estimated number of people living with HIV (2009)	15,000 [11,000-19,000]
Estimated % of people living with HIV who are women (2009)	31%
HIV prevalence (15-49) (2009)	1.5%
HIV prevalence in women 15-24 (2009)	0.7%
HIV prevalence in men 15-24 (2009)	1%

Source: UNAIDS 2010, Human Development Report, UNDP.

	2009	2010
ART coverage	n/a	4571/6800 (67.2%)
Proportion of pregnant women who received HIV testing		91%
Rate of HIV testing/1,000 inhabitants in T&T/LAC		36.7*/81.2
% CD4<200 at initiation of treatment (1)		40%

Source: Public Sector Programme Data 2010

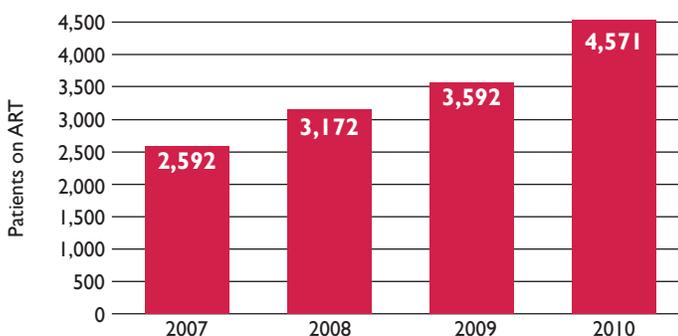
*Testing figures indicative of public sector only. Data are not complete for laboratory HIV testing. Figures represent mostly screening done for PMTCT and at rapid testing sites.

Treatment

National program data suggest that Trinidad and Tobago had 4,571 patients on ART for 2010, of which 216 were children. The reported number of patients initiating ART in 2010 was 979, with a net increase of 1,272 patients on ART from 2009 to 2010 (Figure 1).

Data from the country's largest treatment site, which accounts for 68% of patients on ART, indicate that 88.9% of patients on ART were on first-line and 11.06% were on second-line treatment (Figure 2). Among patients initiating ART, substitution and switching (due to both toxicity and drug failure) occurred during the first 12 months in 33.3%.

Figure 1 Patients on antiretroviral treatment 2007-2010



Service delivery

The country has seven adult treatment centers, each providing services to over 500 patients, and six pediatric centers providing treatment services to fewer than 500 patients.

Quality of services and rational use of ARVs

Total ART regimes for adults (first-line)	10
Adults on first-line ART with a WHO-recommended regime	n/a
Total ART regimes for adults (second-line)	3
Adults on second-line ART with a WHO-recommended regime	n/a
Stock out episodes	n/a
Risk of stock out episodes	n/a
Patients lost to follow-up in the 1st year of ART	n/a
Retention at 12 months of starting ART	99.16%
Viral load tests per ART patient/year (average)	n/a

Source: Country report on EWI 2010 (unpublished).

TB-HIV co-infection

The percentage of TB patients tested for HIV was 98% in 2010, yielding HIV prevalence among TB patients of 23%. This translates to 58 patients reported with TB-HIV co-infection, of whom 12% commenced treatment. No data are available on the number of deaths due to TB-HIV.

Mortality from HIV

According to the National Surveillance Unit's report on HIV mortality, annual deaths from 1983 to 2009 showed a steady increase until 2003, and a decrease from 2003 to 2009 (Figure 3). The trends held for both men and women (not shown).

Figure 2 Percentage of patients on antiretroviral treatment per line of treatment

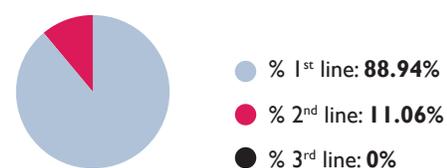


Figure 3 HIV/AIDS Death Rate/100k

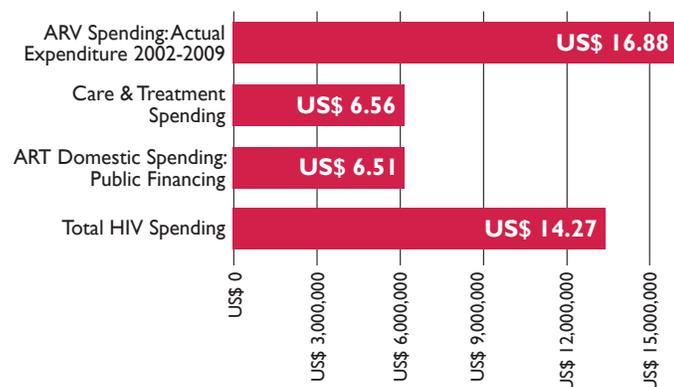


Expenditure

In 2010, Trinidad and Tobago spent US\$ 795,486, 814 on health, of which 51% corresponds to public expenditure. Public health spending was 2% of GNP.

Annual public spending on HIV for 2009 appears in Figure 4. Total care and treatment spending was US\$ 6.56 million, and public financing was 99.3% of this amount (US\$ 6.51 million). This translates to a cost of care and treatment per patient on ART of US\$ 1,814.

Figure 3 Annual spending on HIV, care and treatment, ARV treatment, and public spending on ARV



External financing: Global Fund (GF)

The national ART program is 100% funded by the Government of Trinidad and Tobago.

Analysis and conclusions

Trinidad and Tobago shows timely access to HIV testing, with high testing coverage among TB patients and pregnant women. The success and impact of the ART program is evidenced by the dramatic decrease in HIV mortality rates for both sexes. The percentage of patients on second-line treatment is low, in contrast to an apparently high switching rate among first-line patients. Additional indicators are needed to properly monitor patients and the need to switch lines of treatment following treatment failure (i.e. viral load per patient on ART). Sustainability has been guaranteed through the public financing of the national ART program.

Sources and methodology

The data on patients receiving ARV treatment, retention at 12 months, and other ARV use indicators are drawn from the *Country Reports on Progress toward Universal Access for HIV Prevention, Care, and Treatment 2011* as well as the *Trinidad and Tobago Early Warning Indicator Report 2010*, which provided data from the largest ARV treatment site in the country-. Other programmatic data come from the *HIV/AIDS Coordinating Unit Annual Report 2010*. Additional data on expenditures were taken from the *National HIV and AIDS Spending Assessment (NASA) 2002 – 2009*.

HIV mortality data are reported by the *National Surveillance Unit*. TB-HIV co-infection data come from WHO's Global Tuberculosis Control 2011. Data on TB-HIV deaths were provided in direct communications between countries and PAHO's TB program.

Additional health expenditure data are from the PAHO Basic Indicators.

Definitions

ARV stock-out episode: "A situation in which a product cannot be dispensed due to a lack of supplies and which causes the forced interruption of treatment in at least one patient."

Stock-out risk: "A stock level below the established minimum level or the need to take unplanned measures to prevent a stock-out (emergency purchases, loans, etc.)."

% CD4<200 at beginning of care: "Percentage of patients with basal CD4 <200 cell/mm³ relative to total patients with basal CD4."

Abbreviations

ART= antiretroviral therapy; **ARV**=antiretroviral; **GDP**=gross domestic product; **GF**=Global Fund; **LAC**= Latin America and the Caribbean; **VL**= viral load; **TB**= tuberculosis; **VL**= viral load.

Reference

(1) S.Soyer-Labastide, et al. Circumstances that led to a diagnostic HIV test in a Caribbean island. Medical Research Foundation, Trinidad and Tobago. International AIDS Conference 2010. Abstract no. MOPE0477.

Acknowledgments

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