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

SAINT LUCIA

Pan American Health Organization
Regional Office of the World Health Organization
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Development, HIV epidemic, and response indicators

Human Development Index: St. Lucia /LAC (2010)	0.723 (2011)/0.72
Estimated number of people living with HIV (2012)	452
Estimated % of people living with HIV who are women (2009)	n/a
HIV prevalence (15-49) (2010)	n/a
HIV prevalence in women 15-24 (2009)	n/a
HIV prevalence in men 15-24 (2009)	n/a

Source: Human Development Report, UNDP 2009-2011. D'Auvergne C, King M, Francois M, Baptiste N. OECS clinical guidelines meeting. St. Lucia, 2012.

	2009	2010
ART Coverage	n/a	n/a
Proportion of pregnant women who received HIV testing		n/a
Rate of HIV testing /1,000 inhabitants in St. Lucia /LAC		n/a / 81.2
% CD4<200 at beginning of care		n/a

Source: WHO/UNAIDS/UNICEF. Global HIV/AIDS Response. Progress Report 2011

Treatment

In 2012, St. Lucia reported 213 people with HIV receiving care, of which 169 were on ART. In 2009, there were 124 patients on ART, of which 2% were children, and 52% were women (Figure 1). Among patients treated, 90% were in first-line and 10% in second-line (Figure 2). An unknown number of patients switched from first- to second-line treatment in 2010.

Figure 1 Patients on antiretroviral treatment 2007-2010

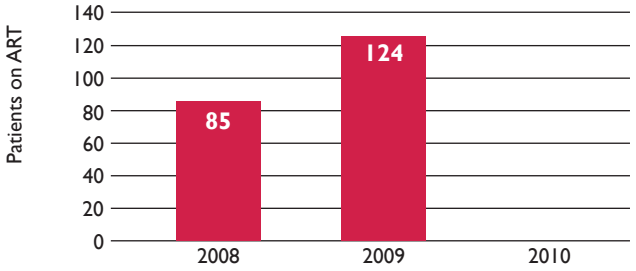
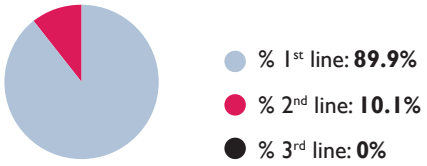


Figure 2 Percentage of patients on antiretroviral treatment per line of treatment



Service delivery

In 2012, St. Lucia has 3 public facilities that provide ART (Vieux Fort Health Center, Victoria Hospital, and Prison).

Quality of services and rational use of ARVs

Total ART regimens for adults (first- line)	n/a
Adults in first-line ART under a WHO-recommended regimen	n/a
Total ART regimens for adults (second-line)	n/a
Adults in second-line ART under a WHO-recommended regimen	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	16.7%
Retention at 12 months from beginning of ART	n/a
Viral load tests per ART patient/year	n/a

Source: Country ARV survey reports, WHO 2010. Country reports of early warning indicators (2009-2011), survey of stock-out episodes 2010, PAHO.

No information is available on the percentage of patients by main treatment regimens.

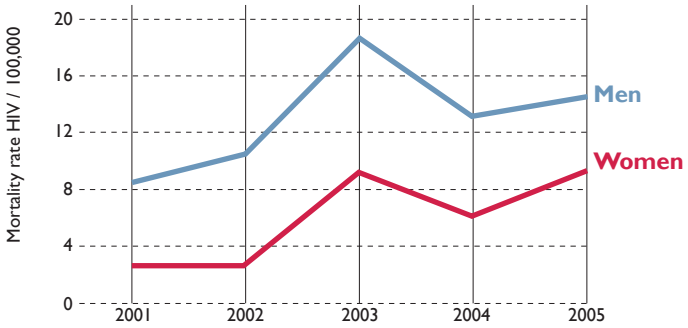
TB-HIV co-infection

The percentage of TB patients tested for HIV was 100% in 2010 with no patients testing positive to HIV. This means that there were no patients with TB-HIV co-infection and no deaths from TB-HIV.

Mortality from HIV

From 2001 to 2005, mortality from HIV is higher among men, with an increasing trend in both sexes (Figure 3).

Figure 3 Standard mortality rate due to HIV by sex



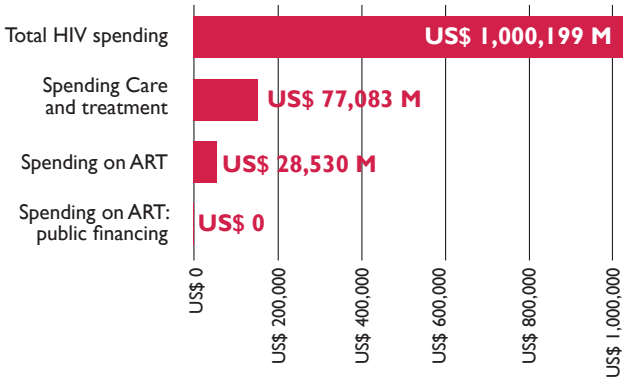
Expenditure

Data for 2009, the national health expenditure was US$ 58 million, of which 48% was government spending, i.e. US$ 28 million. Public expenditure on health as percentage of GDP was 2.4%.

Annual public spending on HIV by the year 2007 is shown in Figure 4. Spending on antiretrovirals was US$ 28,530. In 2007, ARVs were 100% funded from external sources. The country currently funds 60% of ARVs.

ARV spending accounts for 0.1% of public spending on health. The cost per patient on ART is estimated at US$ 366.

Figure 4 Annual spending on HIV, care and treatment, ARV treatment, and public spending on ARV



External financing: Global Fund (GF)

Saint Lucia receives support for its HIV response from the Global Fund, through multi-country proposals from PANCAP (this proposal directly includes Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, and the remaining PANCAP countries benefit indirectly through regional activities) and from OECS (including Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines), in the amount of US$11,190,617 and US$8,375,201, respectively. The PANCAP proposal is in phase 1 and the OECS proposal is winding down. Both proposals include an ART component, which funds virtually all public ARV in the country. The OECS countries have a joint procurement system administered by "Pharmaceutical Procurement Service" (PPS) based in Saint Lucia.

In the framework of south-south cooperation, in April 2006 the Government of Brazil signed a five-year Cooperation Agreement with PANCAP/CARICOM that included the provision of ARV. Between 2007-2010 an annual average of 400 people with advanced HIV infection, in the OECS, were treated with ARV under this agreement. It should be noted that even before any extension of the Agreement, the government of Brazil pledged to make supplies available for an additional two year period (2011-2012). The governments of the OECS, in turn, have pledged to make these supplies available incrementally up to the end of 2012, in order to ensure sustainability.

Analysis and conclusions

Many pieces of information are missing that may preclude a more in depth analysis. HIV mortality presents an increasing trend in the five years analyzed, possibly related to lower ART coverage in those years. The expectation would be to see a currently declining trend. The country has no patient on third-line and a low cost per patient on ART. In this situation, policy dialogue should be engaged in order to ensure sustainability to ART via public financing.

Sources and methodology

The data on patients receiving ARV treatment, retention at 12 months, and programming are drawn from the *Country Reports on Progress Toward Universal Access for HIV Prevention, Care, and Treatment 2011* and the *2011 Surveys on antiretroviral use*, which the competent agencies of each country complete for PAHO/WHO. Data on the supply of medication and stock-outs come from a special survey that PAHO sent to Latin American countries in 2010, which was filled out by national HIV/AIDS programs. Countries report mortality figures to PAHO. The data on TB-HIV co-infection were taken from *Global Tuberculosis Control 2011 of WHO*. Data on mortality from TB-HIV came from the country responses to a PAHO special survey (TB program).

Data on HIV expenditure were drawn from the MEGAS studies carried out by UNAIDS in collaboration with the countries. These data as well as estimates of the HIV epidemic are compiled in AIDSinfo database of UNAIDS (available at http:/www.unaids.org/en/dataanalysis/tools/aidsinfo/).

Health expenditure data are also drawn from PAHO Basic Indicators and the United Nations Department of Economic and Social Affairs. Data on Global Fund projects were taken from its website.

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/mm^3 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; **OECS**=Organization of Eastern Caribbean States; **VL**= viral load.

Acknowledgments

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