

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

GRENADA



Service delivery

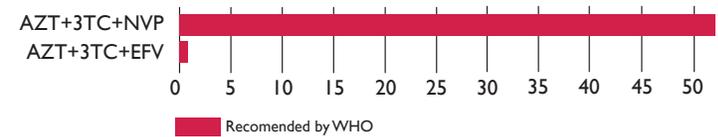
In 2010, Grenada had two public facilities providing ART, one in St. George's and the other in Carriacou, with an average of 20 patients on ART per establishment.

Quality of services and rational use of ARVs

Total ART regimens for adults (first-line)	2
Adults in 1st-line ART under a WHO-recommended regimen	100%
Total ART regimens for adults (second-line)	1
Adults in second-line ART under a WHO-recommended regimen	n/a
Stock-out episodes	n/a
Stock-out risk episodes	n/a
Patient attrition in the 1st year of ART	0%
Retention at 12 months from beginning of ART	100%
Viral load tests per ART patient/year (average)	0.4

Source: Country ARV survey 2010, WHO, Country reports on EWI 2009-2011, PAHO, Country Universal access Reports 2011, PAHO Country stock-out survey, 2010-2011.

Figura 3 Percentage of patients in 1st line by main ARV regimens



TB-HIV co-infection

All known TB patients (n=4) were tested for HIV in 2010, with one testing positive, yielding HIV prevalence of 25% among TB patients. There was one death due to TB-HIV in 2010.

Mortality from HIV

Mortality data show irregular trends, with apparently greater HIV mortality among men and a decline over the past five years, except for a peak in 2008 for men (Figure 4).

Figura 4 Standard mortality rate due to HIV by sex



Development, HIV epidemic, and response indicators

Human Development Index (2009): Grenada/LAC	0.746 (2010)/0.72
Estimated number of people living with HIV (2009)	n/a
Estimated % of people with HIV that are women (2009)	n/a
HIV prevalence (15-49) (2009)	n/a
HIV prevalence in women 15-24 (2009)	n/a
HIV prevalence in men 15-24 (2009)	n/a

Source: UNAIDS 2010, Human Development Report, UNDP

	2009	2010
ART coverage	n/a	n/a
Proportion of pregnant women who received HIV testing		95%
Rate of HIV testing /1,000 inhabitants Grenada/LAC		57/ 81.2
% CD4<200 at initiation of treatment		n/a

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

Treatment

Grenada has 174 people under care for HIV. In 2010, 61 patients were on ART, of which one was under 15 years and 43% were women. The reported number of patients initiated on ART was 13, for a net increase of seven patients from 2009 to 2010 (Figure 1). Among patients in treatment, 84.4% were in first-line, 14.1% were in second-line and 1.6% in third-line treatment (Figure 2). Three patients changed from first- to second-line treatment in 2010, for an annual switching rate of 5.6%.

Figure 1 Patients on antiretroviral treatment 2008-2010

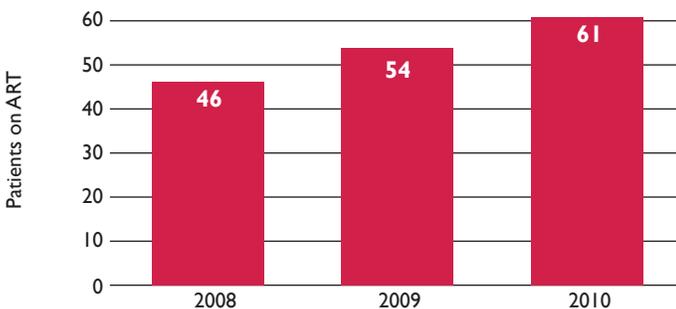
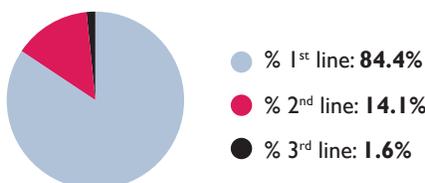


Figure 2 Percentage of patients on antiretroviral treatment per line of treatment

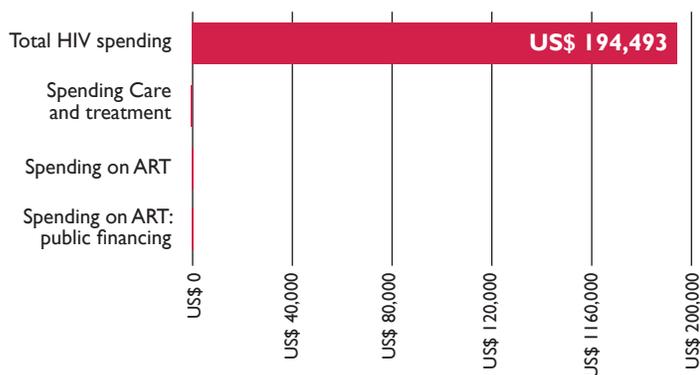


Expenditure

In 2009, Grenada's national health expenditure was US\$ 76 million, of which 53% (US\$ 40 million) was public spending. Public expenditure on health was 5.3% of GDP.

Annual public spending on HIV in 2009 is shown in Figure 5. Spending for antiretrovirals is unknown. Funding for ARVs is nearly 100% through the Global Fund.

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



External financing: Global Fund (GF)

Grenada receives support for its HIV response from the Global Fund, through multi-country proposals from PANCAP (this proposal also includes Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, the Dominican Republic, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago; the remaining PANCAP countries benefit indirectly through regional activities) and from OECS (other members include Antigua and Barbuda, Dominica, 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 Grenada. 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 ARVs. Between 2007 and 2010 an annual average of 400 people with advanced HIV infections in the OECS were treated with ARVs 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, to ensure sustainability.

Analysis and conclusions

HIV testing is well targeted to specific population groups, with high coverage in pregnant women and TB patients. The majority of patients on ART are in first-line treatment. There is good adherence to WHO-recommended regimens. Patient retention is good, although virological monitoring is lower than recommended by WHO. Funding for ARVs is still highly dependent on external sources.

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 to Prevention, Care, and Treatment for HIV 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 PAHO survey sent to Latin American countries in 2010, which was filled out by national HIV/AIDS programs. Countries routinely report mortality figures to PAHO. The data on TB-HIV co-infection were taken from WHO's *Global Tuberculosis Control 2011*. Data on mortality from TB-HIV are 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 UNAIDS' AIDSinfo database (<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 the Global Fund 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/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; **OECS**= Organization of Eastern Caribbean States **VL**= viral load; **TB**= tuberculosis; **VL**= viral load.

Acknowledgments

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