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

SAINT KITTS AND NEVIS

Pan American Health Organization
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Development, HIV epidemic, and response indicators

Human Development Index: St. Kitts and Nevis/LAC (2010)	0.735 (2011)/0.72
Estimated number of people living with HIV (2010)	468
Estimated % of people living with HIV who are women (2009)	n/a
HIV prevalence (15-49) (2010)	0.9%
HIV prevalence in women 15-24 (2009)	n/a
HIV prevalence in men 15-24 (2009)	n/a

Source: Nisbett J, Allen-Ferdinand K. OECS clinical guidelines meeting. St. Lucia, 2012. Human Development Report, UNDP 2009-2011.

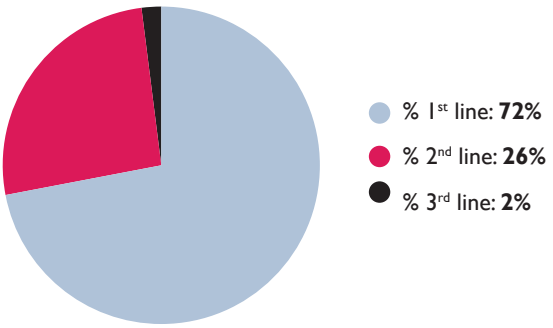
	2009	2010
ART Coverage	n/a	n/a
Proportion of pregnant women who received HIV testing		n/a
Rate of HIV testing /1,000 inhabitants in St. Kitts and Nevis/LAC		n/a / 81.2
% CD4<200 at beginning of care		n/a

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

Treatment

Saint Kitts and Nevis reported that 84 patients were receiving care for HIV in 2010, and 50 of them were on ART. Among patients on treatment, 72% were on first-line, 26% were on second-line and 2% on third-line treatment (Figure 1). The number of patients switching from first- to second-line treatment in 2010 was unknown.

Figure 1 Percentage of patients on antiretroviral treatment per line of treatment



Service delivery

HIV care is decentralized and integrated into the primary health care system (private and public). Patients are seen by a physician of their own choosing. Sixteen physicians offer medical care for HIV.

Quality of services and rational use of ARVs

Total ART regimens for adults (first-line)	n/a
Adults on first-line ART under a WHO-recommended regimen	n/a
Total ART regimens for adults (second-line)	n/a
Adults on second-line ART under a WHO-recommended regimen	n/a
Stock-out episodes	n/a
Stock-out risk episodes	n/a
Patients lost to follow up in the 1st year of ART	n/a
Retention at 12 months from beginning of ART	n/a
Viral load testing per ART patient/year	n/a

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

There is no information available on the percentage of patients on each of the main treatment regimens, although the first-line regimens in use were: ZDV + 3TC + NVP or EFV. Second-line regimens were: ddI or TDF + ABC + LPV/r or TDF +ZDV+ 3TC + LPV/r. Patients transferred from other programs remain in their regimens, which were, for example: ZDV + 3TC + LPV/r or TDF + 3TC (FTC) + EFV (Atripla).

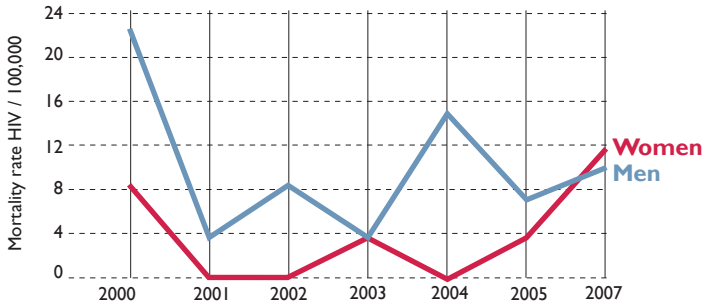
TB-HIV co-infection

All TB patients (100%) had been tested for HIV in 2010, with no patients testing positive. This means that there were no reported patients with TB-HIV co-infection and no reported deaths from TB-HIV.

Mortality from HIV

Irregular mortality data from 2000 to 2007 make it difficult to define trends. It is possible that mortality declined from 2000 with a pronounced upsurge among women in 2007 (Figure 2).

Figura 2 Standard mortality rate due to HIV by sex

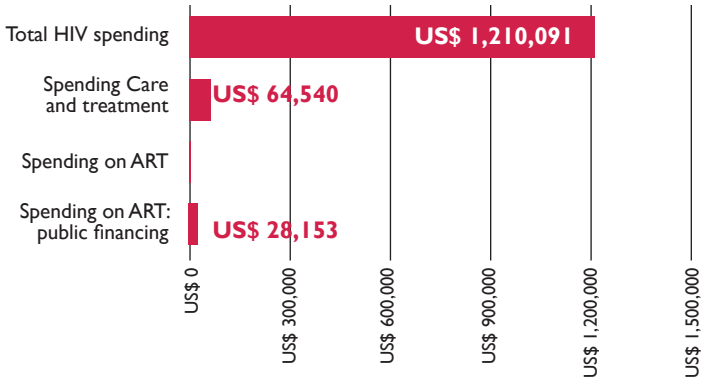


Expenditure

According to 2007 data, St. Kitts and Nevis's national health expenditure was US$23 million, and public spending on health was 49% of that total (US$11 million). Public expenditure on health accounted for 2.2% of GDP.

Annual public spending on HIV in 2009 is shown Figure 3. Spending on antiretrovirals was unknown, and financing was primarily from external sources.

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



External financing: Global Fund (GF)

St. Kitts and Nevis 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, Grenada, Guyana, Haiti, Jamaica, Montserrat, 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, Grenada, 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 St. Kitts and Nevis. 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 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, to ensure sustainability.

Analysis and conclusions

While St. Kitts and Nevis has made antiretroviral therapy available free of cost, it still relies on external financing sources to fund ARVs. There are substantial data gaps that may hinder effective monitoring of progress and program management.

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 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/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; **OECS**= Organization of Eastern Caribbean States **VL**= viral load; **TB**= tuberculosis; **VL**= viral load.

Acknowledgments

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