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

JAMAICA

Pan American Health Organization
Regional Office of the World Health Organization

110
110th ANNIVERSARY

Development, HIV epidemic, and response indicators

Human Development Index: Jamaica/LAC (2009)	0.724/0.72
Estimated number of people living with HIV (2010)	32,000 [21,000-45,000]
Estimated % of people living with HIV who are women (2009)	31%
HIV prevalence (15-49) (2010)	1.7%
HIV prevalence in women 15-24 (2009)	0.7%
HIV prevalence in men 15-24 (2009)	1%

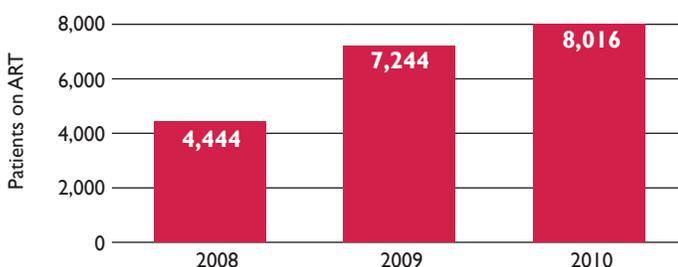Source: UNAIDS 2010, Human Development Report, UNDP

	2009	2010
ART coverage	53% [43-66]	57% [46–69%]
Proportion of pregnant women who received HIV testing	50%	
Rate of HIV testing /1,000 inhabitants in Jamaica /LAC	153.8 / 81.2	
% CD4<200 at beginning of care (1)	49%	

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

Treatment

For 2010, Jamaica reported 8,016 ART patients, of whom 487 were children and 53% were women. The reported number of patients initiated on ART was 1,030 for 2010, with a net increase of 772 patients from 2009 to 2010 (Figure 1). Among patients on treatment, 81.6% were on first-line and 18.8% were on second-line, with no patients on third-line (Figure 2). Annual switching from first- to second-line treatment is estimated at 9%.

Service delivery

Jamaica has a decentralized and integrated service delivery system. For 2010, the country had 23 public facilities providing ART, of which five had over 500 patients and seven had fewer than 100 patients.

Quality of services and rational use of ARVs

Total ART regimens for adults (first-line)	~4
Adults in first-line ART under a WHO-recommended regimen	n/a
Total ART regimens for adults (second-line)	~4
Adults in second-line ART under a WHO-recommended regimen	n/a
Stock-out episodes	0
Stock-out risk episodes	0
Patients lost to follow-up in the 1st year of ART	13.9%
Retention at 12 months from beginning of ART	86%
Viral load tests per ART patient/year (average)	0.4

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

TB-HIV co-infection

The percentage of TB patients tested for HIV was 87% for 2010, with 23% of patients testing positive (29 patients co-infected with TB-HIV). There were five reported deaths from TB-HIV.

Mortality from HIV

PAHO has no information on deaths from HIV for Jamaica.

Figure 1 **Patients on antiretroviral treatment 2008-2010**

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

- % 1st line: **81.6%**
- % 2nd line: **18.8%**
- % 3rd line: **0%**
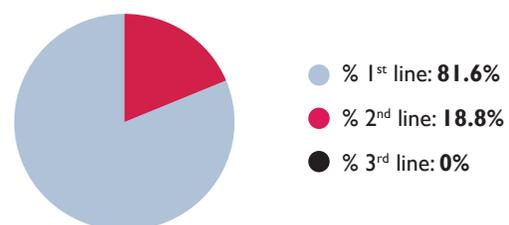
Expenditure

For 2010, Jamaica's national health expenditure was US$ 725,138,146, of which 50% was government spending (US$ 362,569,073). Public expenditure on health was 2.7% of GDP. Annual public spending on HIV for 2010 is shown in Figure 3. Spending on antiretroviral drugs for 2009/2010 was approximately US$ 2 to 3 million annually. In 2010, the Government of Jamaica accounted for 25% of spending on treatment and care (excluding spending on in-patient care and services). ARV spending accounted for 0.8% of total public spending on health.

Figure 3 **Annual spending on HIV, care and treatment, ARV treatment, and public spending on ARV**
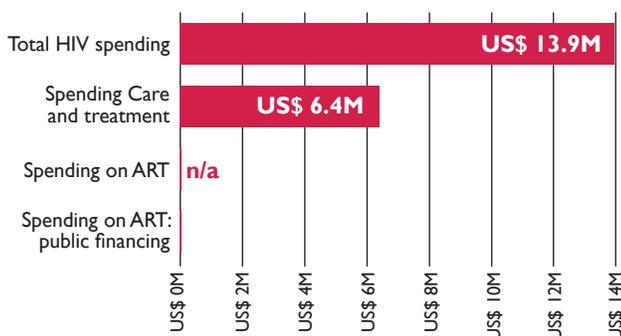
External financing: Global Fund (GF)

Jamaica has the support of the World Bank, PEPFAR and the Global Fund for its HIV response. ARV treatment is mainly funded through the Global Fund. The value of active Global Fund grants is US$ 39.9 million. The currently funded proposal includes a component for ART that finances 100% of antiretrovirals. This funding will end on 7/31/13 but could be extended for 3 years. Pending ongoing political discussions, Jamaica's National Health Fund may be the institution responsible for assuming the cost of ARV procurement beginning in 2013.

Support from PEPFAR and the World Bank does not directly cover ART, however, it provides funding for laboratory infrastructure for HIV.

Analysis and conclusions

Jamaica's response to HIV has been characterized by a high degree of multisectoral participation. The number of patients on ARV treatment has steadily increased, and efforts on HIV testing are among the strongest in the region. Other factors may be intervening because patients are presenting late for care, as shown by the percentage with baseline CD4 under 200 cells/mm^3. The analysis of patients per line of treatment shows a distribution toward first-line treatment, representing an opportunity for greater duration of first-line regimens. Caution is in order, however, because viral load monitoring is low and thus there may be delays in identifying failures of patients on each line of treatment. Antiretroviral expenditure is high, and the country is highly dependent on external funding. Exploration of margins for optimization of ART and new procurement mechanisms could provide benefits. A political dialogue should be undertaken to explore financing mechanisms that would provide greater sustainability and independence from external funding for ART.

Sources and methodology

The data on patients receiving ARV treatment, retention at 12 months, and other rational ARV use 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 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 are 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 are 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/). For Jamaica, additional data on financing were obtained from the National HIV/STI Programme Annual Report 2010. 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

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

Reference

(1) Jamaica National HIV/STI programme. ARV database. Kingston. 2010.