

Epidemiology of HIV Infection in the United States, Mexico and the Caribbean: a Comparison

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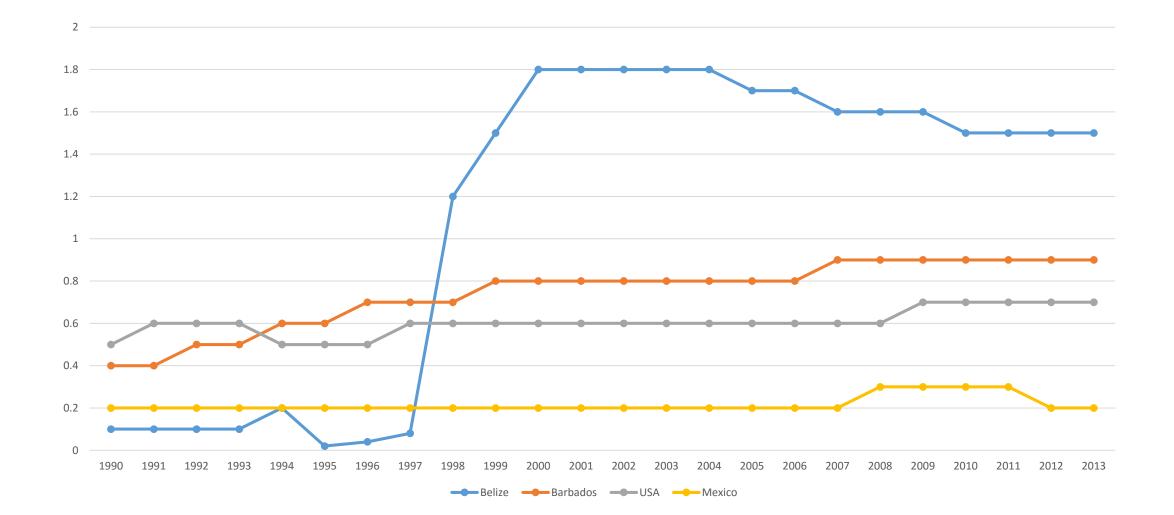
INTRODUCTION

• HIV/AIDS, disproportionately which affects black/African-Americans, continues to be a serious public health issue (Fig 1). The 2010 HIV/AIDS report showed that 44% of new infections in the US are black/African-Americans, although they constitute only 12% of the US entire population. Approximately 1 in 16 black men and 1 in 32 black women will be diagnosed with HIV infection.

Total 36.9 million [34.3 million – 41.4 million]

OBJECTIVE

- To conduct a comparative study to determine the recent trends in HIV/AIDS prevalence rates among the US, Mexico, Belize, and Barbados.
 - And to compare country specific health policies that affect or help in the fight against HIV/AIDS.



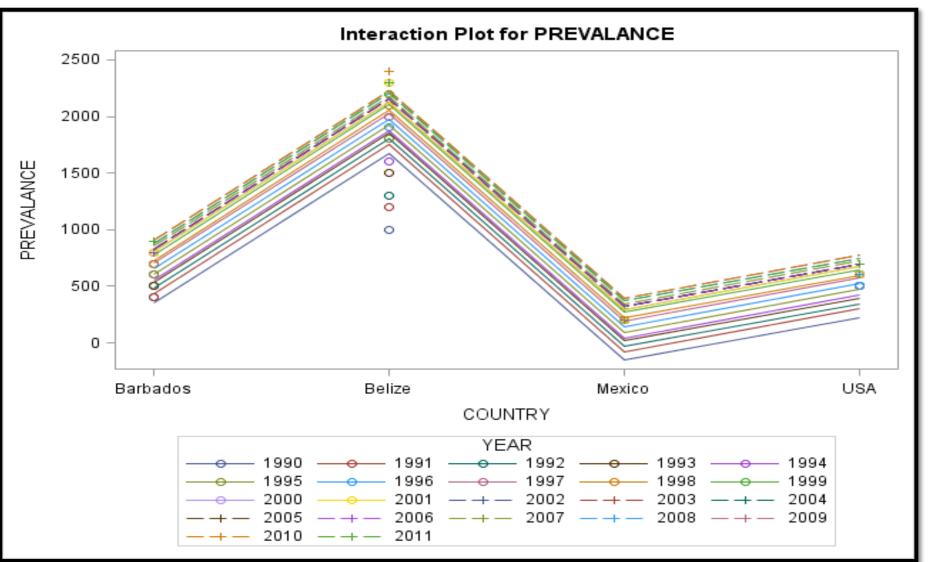


Figure 3: Interaction Plot of HIV Prevalence Rate among the Countries by Year



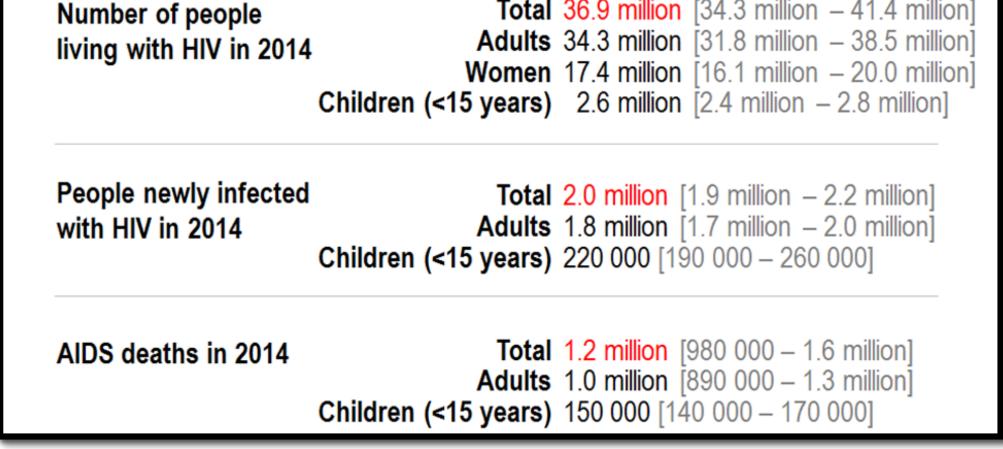


Figure 1. Global Summary of the AIDS Epidemic in 2014 http://www.who.int/hiv/data/epi_core_july2015.png?ua=1

METHODS

- HIV/AIDS data (incidence, and prevalence rates of HIV/AIDS) was obtained from the Centres for Disease Control and Prevention, IndexMundi, World Health Organization (WHO), and Joint United Nations Program on HIV/AIDS (UNAIDS)
- Data was analysed using Statistical Analysis Software (SAS) v 9.1) and Microsoft Excel
- Analysis of Variance (ANOVA) was performed to compare

Figure 2.Prevalence of HIV, total (% of population ages 15-49)

RESULTS

- There were no significant differences (P < 0.001) in the prevalence of HIV in the US and Barbados with a predominantly black population.
- There were significant differences (P<0.001) in the prevalence of HIV between the United States and Mexico, the rate is higher in the US than in Mexico
- There were significant differences

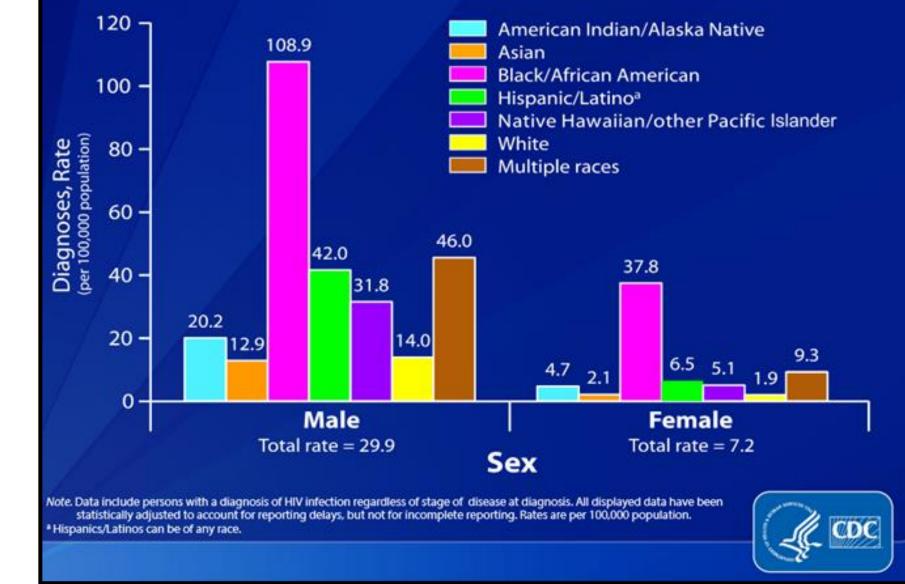


Figure4: Rates of Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Race/Ethnicity, 2012, United States

Table 1. United States, Mexico, Belize, and Barbados HIV/AIDS Policies

Country	National Policy/Initiative	Strategy
United States	 (National HIV/AIDS Strategy 2010-2020) Affordable Care Act, 2010 Center for Disease Control (CDC) High Impact HIV Prevention Expanding HIV Testing Initiative (CDC) Ryan White HIV AIDS Program 	 Ensure people with pre-existing condition are covered Medicaid coverage expansion Access to a more affordable private health insurance Lowered cost of prescription drugs for Medicare Inclusion of HIV testing in preventive services Increase in coordinated care for people with chronic health conditions including AIDS Planning, prioritizing, and monitoring, Surveillance, Biomedical interventions, diagnostics, laboratory, and health services research, Behavioral, social, and structural interventions research, and Prevention programs, capacity building, and program evaluation.
Mexico	 National Center for HIV/AIDS Prevention and Control (CENSIDA) National Network of HIV/AIDS ambulatory health care facilities Universal free access to antiretroviral medication for individuals with HIV (2004) AIDS Education and Training Centers (AETC). March 2008 	 Universal access to ART Assisting HIV Patients Returning to Mexico Establishment of Ambulatory Centers for the Prevention and Treatment of AIDS and Sexually Transmitted Infections Training of HIV coordinators and educators
Belize	 The National AIDS Commission of Belize National HIV/AIDS Policy, 2006 Belize Social Investment Fund (BSIF) The Labor Amendment Act No. 3, approved in 2011, grants for the equitable treatment of women in the labor force Voluntary HIV Counseling and Testing Centers, 2002 	 Prevention of mother to child infection Provision of free HIV testing Provision of free ARV treatment Empowerment of women Creation of VCT centers to reduce stigma and discrimination Provision of access to support groups
Barbados	 The Barbados National HIV/AIDS Commission (2001) (National HIV/AIDS Strategic Plan 2014-2018) Introduction of fully subsidized Highly Active Anti-Retroviral Therapy (HAART). Development of a Faith-based Committee of the NHAC following consultation between the NHAC and the Faith-Based Organizations. 	 The national response holistic and multi-sectoral expanded HIV/AIDS not considered only as a medical problem but social, economic, cultural and legal Training of HIV coordinators and educators in all government ministries Connecting and sensitizing government, the private sector, and civil society about the shared responsibility of mitigating the impact of HIV pandemic Establishment of VCT sites Creation of QEH/Clinics in each community for the free treatment of people living with HIV/AIDS

select variables between the countries and across time

• A review of each country's HIV/AIDS policy was performed.

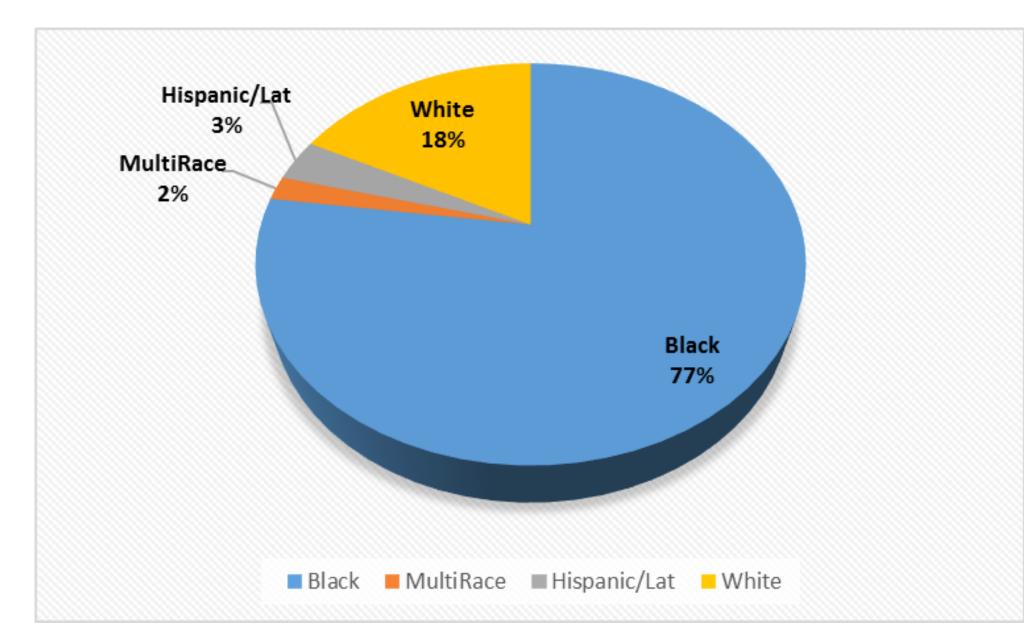


Figure 5. Estimated adults and Adolescents Diagnosed with HIV, by Race/Ethnicity, Mississippi, 2011. (http://www.cdc.gov/nchhstp/stateprofiles/pdf/Mississippi_profile.pdf

(P<0.001) in the prevalence of HIV between the United States and Belize, the US has a lower rate

- Generally, all the four country have a similar trend in the HIV containment
- HIV/AIDS treatment is free at government hospitals in other countries except the US
- Stigma and discrimination (S&D) are common in all the countries

CONCLUSIONS

If the affordable health care act is well implemented, probably more uninsured and underinsured Americans will have more access to antiretroviral treatments and other HIV/AIDS management and prevention services "There is no reason to feel fear or shame. HIV is an illness, not a crime or a judgment. We have to move beyond that as a people and use the means available to us to prevent it." Dr. Ernest Massiah, UNAIDS Caribbean **Regional Support Team Director**

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