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TROUBLE IN PARADISE: HIV/AIDS IN THE CARIBBEAN

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TROUBLE IN PARADISE: HIV/AIDS IN THE CARIBBEAN

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M.P.H., Emory University, 2012

B.S.N., University of Virginia, 2006

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An abstract of

A Thesis submitted to the Faculty of the  
Rollins School of Public Health of Emory University  
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2012

## **Abstract**

### **TROUBLE IN PARADISE: HIV/AIDS IN THE CARIBBEAN**

**BY**

**Samantha Dittrich**

The Caribbean has the world's second highest adult prevalence rate of HIV after sub-Saharan Africa and AIDS-related mortality remains the leading cause of death among 25-44 year olds in the region. Heterosexual sex is the main route of transmission throughout the Caribbean. Women are particularly vulnerable to HIV infection as more than half of the people living with HIV are women. Haiti and the Dominican Republic have one of the highest HIV-positive rates in the Americas whereas the Cuban population has the lowest prevalence rate in the Americas and one of the lowest rates of AIDS-mortality in the Caribbean.

The purpose of this project is to examine how and why AIDS mortality rates and transmission patterns vary across three Caribbean countries: Cuba, the Dominican Republic, and Haiti. Additionally, the goal of this project is to show how a small, low-income country like Cuba has managed to have an extraordinary low prevalence rate of HIV/AIDS and how the Cuban response to HIV/AIDS may provide useful strategies to the Dominican Republic and Haiti such as awareness and prevention programs, educational campaigns, and HIV testing and screening. In an effort to address these questions and offer an analysis on how culture and religion, country specific infrastructure, and lack of public health policies and educational resources have contributed to the HIV/AIDS crisis in the Caribbean, a comprehensive review of relevant literature was conducted. The specific data reviewed/examined focused on incidence and prevalence of HIV/AIDS, the origins of HIV/AIDS in the Caribbean, the history of Cuba, the Dominican Republic, and Haiti, characteristics of the Cuban, Dominican, and Haitian populations, as well as case studies and qualitative studies.

The main findings showed that the HIV/AIDS epidemic in the Caribbean is still largely concentrated in most-at-risk populations and that new HIV infections now affects men and women equally. As evident in Cuba, the Dominican Republic, and Haiti, many gaps exist in access to prevention and care as well as in efforts to address the HIV/AIDS epidemic in the Caribbean which has been compounded by the social, economic, and political realities of the region.

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Lastly, I would like to dedicate this Thesis to Jonathan—my first patient with AIDS who passed away in 2006 from AIDS-related complications. I thank him for inspiring me to continue to help others in need.

Aire durando

*Who is it has killed this man  
and left his voice above ground?*

*There are dead men rising, rising,  
as their coffins are laid down.*

*This sweat...who caused it to perish?  
What costs a poor man his breath?*

*Who is it has killed these hands?  
No man is contained by death!*

*There are dead men who stride taller  
the deeper their coffins fall.*

*Who felled the length of this man  
with his upright voice so tall?*

*There are dead men deep as roots  
who feed the harvest their grace.*

*Who is it has killed these hands,  
who has killed this sweat, this face?*

*There are dead men rising, rising  
as coffins sink in their place.*

Manuel del Cabral

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## List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
BBC	British Broadcasting Corporation
CAREC	Caribbean Epidemiology Centre
CDC	U.S. Centers for Disease Control and Prevention
CIA	U.S. Central Intelligence Agency
CIDA	Canadian Development Agency
COPRESIDA	Consejo Presidencial de SIDA
CSW	Commercial Sex Worker
DFID	UK Department for International Development
DHS	Demographic and Health Surveys
ENDESA	Health and Demographic Survey
FSW	Female Sex Worker
GDP	Gross Domestic Product
GTZ	Gesellschaft für Technische Zusammenarbeit (German International Development Agency)
HIV	Human Immunodeficiency Virus
KfW	Kreditanstalt für Wiederaufbau
MARP	Most-at-Risk population
MSM	Men Who Have Sex With Men
PAHO	Pan American Health Organization
PIH	Partners in Health
PLHIV	People Living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission
PSI	Population Services International
STD	Sexually transmitted disease
STI	Sexually transmitted infection
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Program
U.S.	United States
USAID	United States Agency for International Development
USD	United States Dollar
WHO	World Health Organization

## Glossary of Common Terms

AIDS	Acquired immune deficiency syndrome, a syndrome involving a defect in cell-mediated immunity that has a long incubation period, follows a protracted and debilitating course, is manifested by various opportunistic infection, and without treatment has a poor prognosis
Bateyes	Sugar plantations
The Caribbean	The states and islands of the Caribbean Sea including Anguilla, Antigua-and-Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Haiti, Honduras, Jamaica, Martinique, Montserrat, Netherlands Antilles, Puerto Rico, Saint Barthélemy, Saint Kitts-and-Nevis, Saint Lucia, Saint Martin, Saint Vincent-and-the-Grenadines, Trinidad-and-Tobago, Turks-and-Caicos Islands, and United States Virgin Islands
Hispaniola	The second largest island of the West Indies politically divided into Haiti (west) and the Dominican Republic (east)
HIV	Human immunodeficiency virus, a retrovirus that causes AIDS
HIV Incidence	HIV incidence is the number of new HIV infections in a population during a certain time period.
HIV Prevalence	The percentage of the population living with HIV
Kaposi's Syndrome	A cancer of the skin, lungs, and bowel due to a herpes virus
Low Income	A gross national per capita income of \$1,005 or less
Middle Income	A gross national per capita income of \$1,006 - \$3,795 (lower middle income) and \$3,976-\$12, 275 (upper middle income)

## Tuberculosis

A chronic infection caused by a bacterium called *Mycobacterium tuberculosis*, generally transmitted by the inhalation or ingestion of infectious droplets that usually affects the lungs, although infection of multiple organ systems occurs.

## Chapter I: Introduction

No war on the face of the Earth is more destructive than the AIDS epidemic.

Colin Powell

### *Introduction*

Since its emergence the Caribbean thirty years ago in, the HIV/AIDS epidemic has been driven by sexual transmission, migration, and both intravenous and non-intravenous drug use. HIV/AIDS still largely affects high-risk populations including commercial sex workers (CSWs), men who have sex with men (MSM), and drug users but is now spreading to the general population. The Caribbean has an adult HIV prevalence rate of 1% which is higher than in any other world regions outside of sub-Saharan Africa. As shown in Table 1, HIV/AIDS remains the leading cause of death among men and women aged 20-59 in the region accounting for 15.7% and 14.5% of deaths respectively.

Table 1: Leading Causes of Death in the Caribbean Among Adults Ages 20-59

Males		Females	
<b>HIV/AIDS</b>	<b>15.7%</b>	<b>HIV/AIDS</b>	<b>14.5%</b>
Ischaemic heart disease	10.2%	Diabetes	10.9%
Homicide	6.2%	Ischaemic heart disease	7.9%
Diabetes	6.2%	Cerebrovascular disease	2.7%
Suicide	5.9%	Malignant neoplasm of the breast	5%

Source: PAHO/WHO. Health Conditions and Trends, 2007

Although increased access to antiretroviral treatment (ART) has led to a decrease in AIDS related mortality, AIDS-related illnesses were nonetheless the fourth leading cause of death among Caribbean women and fifth leading cause among Caribbean men in 2007 according to the Caribbean Epidemiology Centre (UNAIDS, 2008, 2010a).

The main mode of HIV transmission in the Caribbean is unprotected sex particularly paid sex between men and women. This has led to an increase in the number of women, especially

young women, who are living with HIV. In 2008, females represented 50% of all people living with HIV/AIDS (PLHIV) in the Caribbean as compared to 35% in 1990 (UNAIDS, 2010a). Yet, sex between men and drug use also plays a significant role in HIV transmission in the Caribbean. Among female sex workers (FSW), HIV prevalence is high compared to the prevalence in the adult population and HIV prevalence among MSM is thought to be even higher. From 2006-2008, estimates of HIV prevalence among CSWs varied from 2.7% in the Dominican Republic to 27% in Guyana. The HIV prevalence among MSM also varied from 6.1% in the Dominican Republic to 32% in Jamaica. Given discrimination against homosexuals and bisexuals in the Caribbean, however, it is likely that the reported data underestimates the true prevalence rates among MSM (UNAIDSa, 2010). Prevalence is also high among crack cocaine and heroin users who often sell sex to support their drug habit and engage in unprotected and risky sex that not only increases their own risk but the risk of their sexual partners (Day, 2009).

What is unique about the HIV HIV/AIDS epidemic in the Caribbean is how the HIV burden varies considerably between and within countries in this region. Cuba, for example, has a very low HIV prevalence of 0.1% while the highest number of PLHIV is on the island of Hispaniola where the combined number of PLHIV in Haiti and the Dominican Republic is 182,000, accounting for approximately 70% of all PLHIV in the Caribbean (WHO, 2011). As compared to other countries in Latin America, the Caribbean remains diverse in terms of its history, politics, culture, religion, geographic location, economic conditions, gender roles, and sexual practices (Smallman, 2007). These are all important factors when considering why the HIV/AIDS epidemic has affected this particular region so profoundly and how commercial sex and drug abuse has further worsened the spread of the virus. Unless current trends are reversed, the HIV/AIDS crisis will only continue to escalate to alarming levels and could lead to a major

developmental catastrophe that threatens to dismantle the social and economic achievements of this region (World Bank, 2010).

### ***Problem Statement***

The HIV/AIDS epidemic in the Caribbean has always been concentrated among the high-risk population groups but it is now accelerating rapidly and extending to the general population due to a lack of appropriate interventions targeting among most at-risk populations (MARPs). Nine out of the ten larger countries have generalized HIV/AIDS epidemics, with prevalence over 1% among the adult population. Despite prevention efforts, the number of new HIV infections has not significantly declined over the last 10 years (UNAIDS, 2010a). Consequently, already financially strained health systems in the region have felt this burden as the number of people who require HIV treatment and health services will continue to increase if prevention measures are not amplified.

The impact of the HIV/AIDS epidemic in the Caribbean has also begun to have negative consequences for both economic and social development in the region. The Pan American Health Organization (PAHO) maintains that the HIV/AIDS epidemic threatens to undo many of the health gains made in the Caribbean (PAHO, 2001). According to the Macroeconomics and Health Division of the World Health Organization (WHO), “The economic implications of the HIV/AIDS epidemic are enormous. Studies have shown that if unchecked, the total cost to Caribbean Community countries excluding Haiti could reach \$US 80 million by the year 2020 and there will be significant reductions in the GDP of the countries” (2003). For many of the countries in the Caribbean, the financial impact of HIV could be devastating. The majority of the countries in the Caribbean are too small and poor to be in a position to nationally respond to the HIV/AIDS epidemic and to support the financial cost of HIV programs (World Bank, 2001).



Since the 1990s, the Caribbean has received over \$1.3 billion United States Dollars (USD) for its HIV programs; however, external resources are likely to decline due to global economic crises. Many Caribbean countries are now classified as upper middle income and are therefore, less eligible for developmental assistance which will be detrimental to the viability of both national and civil society responses (UNAIDS, 2010a).

In 2001, the World Bank asserted that “what happened in Africa in less than two decades could now happen in the Caribbean if action is not taken while the HIV/AIDS epidemic is in the early stages” (World Bank, 2001). Although progress has been made across the Caribbean, The World Bank stated almost a decade later that challenges still persist in the Caribbean in responding to the HIV epidemic in the region (The World Bank, 2010). Many efforts to address the HIV/AIDS epidemic have been compounded by the social, cultural, economic, and political realities of the region. With a change in the gender profile of the HIV/AIDS epidemic since HIV first emerged in the region, what was believed to only be an “exotic illness of urban, United States gays” now affects men and women equally (Smallman, 2007).

As Caribbean economic conditions have worsened, areas of poverty have increased and new norms of masculinity and femininity have emerged which have all led to changes in sexual behavior and women’s vulnerability. Once believed to be immune to HIV, stigmatized groups including MSM, CSWs and young people with multiple partners can no longer be thought of as sexually excluded. Men and women alike now have multiple and concurrent partners driving the epidemic to now extend to the general population and making it that much more difficult to contain (UNAIDS, 2010a). Intensified efforts are needed now more than ever in the Caribbean region so that every country at risk can develop an appropriate national HIV/AIDS program that encompasses prevention, treatment, and basic care. To act decisively and effectively respond to

the crisis, however, first requires a better understanding of the complex interplay between the social, economic, and behavioral factors that have fueled the HIV/AIDS epidemic in this region.

### ***Purpose Statement***

The purpose of this project is to examine how and why AIDS mortality rates and transmission patterns vary tremendously across the Caribbean countries. This project will focus on three countries in particular: Cuba which has the lowest HIV prevalence rate in the Americas; Haiti, which has the highest; and the Dominican Republic which is closely tied to Haiti in terms of history and geography and which has one of the highest rates of commercial sex work and sex tourism. By presenting a snapshot of the HIV/AIDS epidemic in Cuba, Haiti, and the Dominican Republic, the goal of this project is to offer an overview of the challenges and opportunities in response to HIV/AIDS and to propose recommendations for Caribbean countries to address the region's public health crisis.

### ***Research Questions***

The goal of this project is to construct a coherent overview of the HIV/AIDS crisis in the Caribbean within the context of Cuba, Haiti, and the Dominican Republic. To achieve this goal, it will be necessary to address the following research questions:

- In what ways does each country's unique situation in terms of politics, geographic location, wealth, religion, and culture reflect how Cuba, the Dominican Republic, and Haiti are affected by the HIV/AIDS pandemic?
- How have Cuba, the Dominican Republic and Haiti states/governments responded to the HIV/AIDS crisis in their countries and what barriers exist in developing strategic plans, legislation, and HIV-related programs and services?

- How has commercial sex work in the Caribbean involving both foreign and local clients contributed to infection rates in Cuba and in particular rising rates in the Dominican Republic and Haiti?
- How have health authorities and national organizations of Caribbean countries responded to changes in cultural attitudes and social behavior with respect to HIV stigma, machismo, and homophobia?

## **Chapter II: Methodology**

### ***Introduction***

To offer an overview of the HIV/AIDS epidemic in the Caribbean required a comprehensive review of relevant literature on Caribbean culture, past and current HIV/AIDS policies and prevention activities, changes in HIV and epidemiological patterns in addition to current statistics among the Caribbean countries. The goal of the research project was to present a HIV/AIDS cumulative profile (including prevalence rates, total cases of HIV/AIDS, percentage of AIDS-related deaths) in the Caribbean and to examine theoretical rationales as to why HIV/AIDS is so prevalent in this region. The specific data that was collected focused on incidence and prevalence of HIV/AIDS, characteristics of the Caribbean countries' population, as well as a secondary analysis including case studies and qualitative studies.

This project first began with an interest in Cuba's response to the HIV/AIDS crisis but after I traveled to the Dominican Republic, it was apparent that HIV/AIDS was not just a problem in this country but in many other Caribbean countries. After conducting preliminary research, the primary goal of the project was to determine how and why AIDS mortality rates and transmission patterns varied across the Caribbean countries particularly looking at the current situation in Cuba, the Dominican Republic, and Haiti. Once the primary objectives of the project were formulated, the next step was to begin the comprehensive literature review and collect the necessary data in order to be able to make an appropriate conclusion.

### ***Data Collection & Analysis***

The data collection process first began with a literature review on HIV/AIDS in the Caribbean followed by specifically searching for information on the HIV/AIDS epidemic in

Cuba, the Dominican Republic, and Haiti. A list of key words to use in the search process was created to identify relevant publications to the topic. Broader search terms included but were not limited to HIV, AIDS, HIV response, AIDS response, country situation, and health care. Less broad but still relevant terms included but were not limited to sex tourism, commercial sex work, epidemiological profile, and MARPs. Sources for this project included historical and recent publications, vital statistics, case studies, and data from the WHO, UNAIDS, the World Bank, CDC, and USAID. Most of the sources were easily available online; however, print copies of several books were also obtained. Primary search tools to conduct the literature review included Emory University's EUCLID, discoverE, and eJournals and the University of Virginia's VIRGO in addition to various search engines such as PubMed, Google, and Google Scholar. Once journal articles and books were read, the bibliography or reference sections of these sources became excellent entry point into finding additional reference materials.

While reviewing articles and books, a review guide was created to record references and summaries of articles and books. This was to assist in critiquing the research and to prevent having to re-read many sources. Noted in the review guide were the strengths and weaknesses of each article or book as well as main points that were found to be relevant to this project. Each source was critically evaluated, especially the online sources to ensure they were reliable. Most of the information obtained was as current as possible; however, older sources were used to gain a better understanding of the historical context of Cuba, Haiti, and the Dominican Republic. In addition to the publication date and legitimacy of the source, additional inclusion and exclusion criteria of sources included relevancy and validity of the text to the overall research picture.

To be able to make a critical analysis of all collected information it was important to remain both objective and critical throughout the literature review process. Data from sources

were classified and compared against each other. Any contradictory sources subsequently required a search for additional sources. During the literature review, it was helpful to take notes on any online sources and to highlight important text and mark any useful chapters in printed sources. A notebook was used to jot down any thoughts, ideas, or key points throughout the research process as well as to formulate outlines identifying major points to be covered in each chapter of the project. These notes were used to put key information into my own words which was helpful in understanding and remember the information. Once the writing process began, the main objective was to summarize and synthesize the ideas and arguments of others while incorporating factual information within each paragraph as well as throughout the project. By working methodologically and systematically, every piece of relevant information was coherently and cohesively included into the project.

### ***Limitations and Delimitations***

By conducting a literature review, the method of data collection involved identifying, reading, summarizing and evaluating previously published articles, books, reports, and Internet entries on HIV/AIDS in the Caribbean. The methodology employed for this project was data collection from a mix of primary and secondary sources. Although the literature review was an efficient method to research the HIV/AIDS epidemic in the Caribbean, there were some limitations and delimitations to this project. First, this project was limited to only secondary research and relied solely on synthesizing previously collected information. This is not necessarily a weakness, however, the incorporation of first-hand information from some of the most vulnerable populations in Cuba, the Dominican Republic, and Haiti as well as key informants from these countries would have made the data collected that much stronger. Second, the decision to focus primarily on Cuba, the Dominican Republic, and Haiti versus any of the

other countries in the Caribbean was because of interest in these three countries. Intrigued by Cuba's low prevalence rate of HIV, Haiti's high prevalence rate, and the Dominican Republic's high rates of commercial sex work and sex tourism, I selected these three countries to be the focus of this project.

### Chapter III: The Origins of HIV/AIDS in the Caribbean

We have broken the trajectory of the AIDS epidemic. But we still have a long way to go.

Turmani Diabeté

#### *Regional Overview*

Figure 1. Map of the Caribbean



Source: CIA Factbook

The documented history of the HIV/AIDS epidemic in the Caribbean began in 1981 when the first cases of what was to become known as AIDS were recorded in Haiti; however, a high prevalence of AIDS had already been documented among Haitians living in the United States around that time (Gilbert et al., 2007) and a retrospective analysis of patients affected by Kaposi's Sarcoma has shown that several cases of AIDS had already been recorded as early as 1979 (Pape, 1999). Jamaica and Bermuda next reported cases in 1982 and by the late 1980s; all Caribbean countries had reported at least one AIDS case (UNAIDS, 2010b). The current HIV/AIDS epidemic in the Caribbean occurs in the context of high levels of poverty and unemployment, gender, and other inequalities in addition to stigma (UNAIDS & WHO, 2008). Such factors can all aid the spread of HIV as well as hinder the efforts to control the epidemic.



Unfortunately, quality epidemiological data is limited in the Caribbean; therefore, the true magnitude and characteristics of the epidemic may be uncertain (UNAIDS, 2011).

### *Epidemiological Patterns and Trends in the Caribbean*

The HIV prevalence among adults in the Caribbean is about 1.0% (0.9% – 1.1%), which is higher than in other all regions outside sub-Saharan Africa. Yet, the number of PLHIV in the Caribbean is relatively small—240,000 (220,000 –270,000) in 2009 and has varied little since the late 1990s (UNAIDS, 2010a). As shown in Table 2, the largest number of PLHIV is on the island of Hispaniola where the combined number of PLHIV in Haiti and the Dominican Republic is 182,000 accounting for approximately 70% of all PLHIV in the Caribbean (UNAIDS, 2010b).

Table 2: Estimated Number of PLHIV and Adult Prevalence in 2007

Country	Estimated PLHIV	Adult HIV Prevalence
Bahamas	6,200	3.0%
Barbados	2,200	1.2%
Belize	3,600	2.1%
Cuba	6,200	0.1%
Dominican Republic	62,000	1.1%
Guyana	5,900	1.2%*
Haiti	120,000	2.2%
Jamaica	27,000	1.6%
Suriname	6,800	2.4%
Trinidad and Tobago	14,000	1.5%
<b>Total</b>	<b>226,900</b>	

Source: UNAIDS, 2008 Report on the Global AIDS Epidemic. \*UNAIDS/WHO estimates for 2009

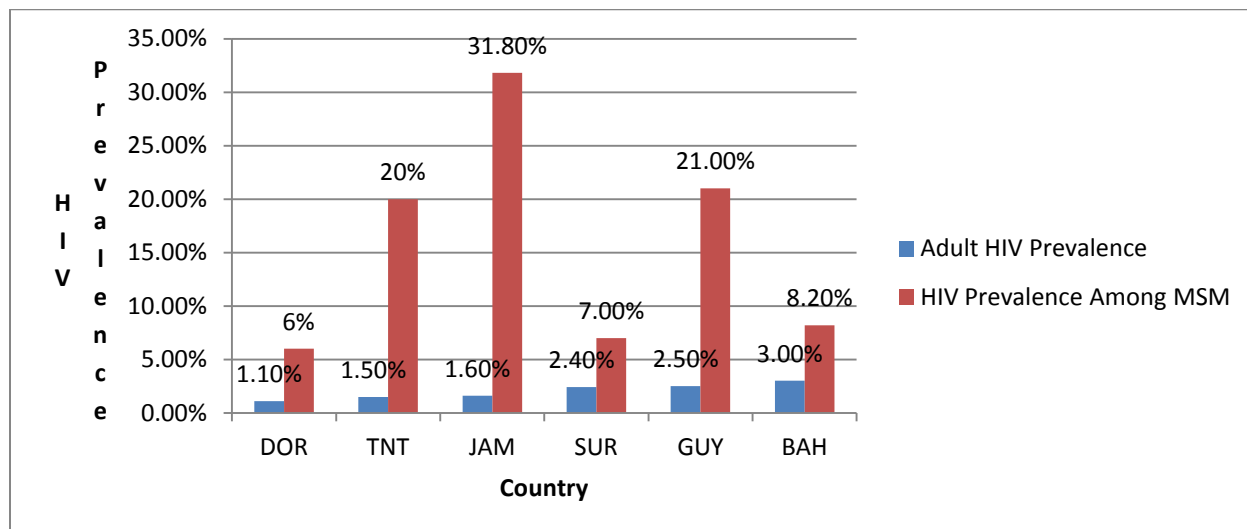
Although Haiti and the Dominican Republic are estimated to have the highest number of PLHIV, data on adult HIV prevalence differs within the Caribbean region. The Bahamas (3%) has the highest adult HIV prevalence, followed by Suriname (2.4%) and Haiti (2.2%) (UNAIDS, 2010a). In contrast, Cuba has an exceptionally low HIV prevalence (0.1%). The burden of HIV varies greatly between and within countries in the region. For example, HIV prevalence is highest in the parishes of St. James, Kingston, and St. Andrew in Jamaica (Jamaica Ministry of

Health, 2007) and in Haiti, the departments of Nord and Les Nippes have the highest prevalence (UNAIDS, 2010b). HIV infection levels in the neighboring Dominican Republic also vary considerably with HIV prevalence among communities near sugar plantations (the bateyes) which is about four times higher than the national average (ENDESA, 2008).

Although there is a high HIV prevalence in the Caribbean, there are fewer PLHIV as compared to the rest of the world as well as a slight decline in the number of new HIV infections in the region. An estimated 17,000 (13,000 – 21,000) people became newly infected with HIV in 2009, about 3000 less than the 20,000 (17,000 -23,000) estimated to have been infected in 2001 (UNAIDS, 2010b). Furthermore, AIDS-related deaths are falling in the Caribbean. The increased availability of antiretroviral therapy (ART) as well as care and support to PLHIV, particularly in low- and middle- income countries, has led to the decrease in the number of AIDS-related deaths globally. In 2010 alone, antiretroviral therapy averted an estimated 700,000 deaths in low- and middle- income countries (WHO, 2011). An estimated 12,000 (8,500 - 15,000) people lost their lives due to AIDS in 2009 in the Caribbean as compared to 19,000 deaths (16,000 – 23,000) in 2001 (UNAIDS, 2010b). Currently, 51% people who need treatments are able to access it, though 49% cannot (UNAIDS, 2010a). Access to treatment has led to people living longer, healthier, and more productive lives.

Unprotected sex between men and women particularly paid sex is the main mode of HIV transmission in the Caribbean. Sex work, including sex tourism, is a primary source of transmission (UNAIDS, 2011b). As shown in Figure 2, HIV prevalence is highest very high among MSM.

Figure 2. Comparing Adult HIV Prevalence in 2007 and HIV Prevalence Among Caribbean MSM (2005-2008)



Source: UNAIDS. 2008 Report on Global AIDS Epidemic and National HIV Seroprevalence Surveys.

The HIV prevalence among MSM is very high but varies from 6.1% in the Dominican Republic to 32% in Jamaica (UNAIDS, 2010a). In the other countries in the region men outnumber women among PLHIV and many men who have sex with men also have sex with women (WHO, 2011). One in five men who have sex with men surveyed in Trinidad and Tobago were living with HIV, for example, and one in four said they regularly also had sex with women (Figueroa, 2008)). The 2011 Global HIV/AIDS Progress report provides evidence of increasing HIV infections among men who have sex with men in Cuba and the Dominican Republic (WHO, 2011).

Among FSW, HIV prevalence is high compared to the prevalence in the adult population and it is estimated that the number of females living with HIV is increasing. In 2010, an estimated 53% (47 – 61%) of adults living with HIV were women. This reflects the pattern of infection in Haiti which has the largest epidemic in the region, followed by the Bahamas, Belize,

and the Dominican Republic (WHO, 2011). The prevalence ranges from 3% in the Dominican Republic to 24% in parts of Suriname (USAID, 2011). The Caribbean remains the only region, besides Sub-Saharan Africa, in which more adult women than men are living with HIV (WHO, 2011). Young females are at high risk for exposure to HIV since they are more likely to have relationships with older men, who because of their age are more likely to have acquired HIV (CAREC, 2007a). Demographic and Health Surveys (DHS), data consistently show that in the Dominican Republic and Haiti, for example, young females are 2 to 3 times more likely to be infected with HIV than young males in the same age group (COPRESIDA, 2007).

Other MARPs in the Caribbean include drug users and prisoners. In Bermuda and Puerto Rico, unsafe injecting drug use contributes significant to the spread of HIV. In Puerto Rico, contaminated drug paraphernalia accounted for about 40% of infections among males in 2006 and for 27% among females (CDC, 2006). In 2008, the HIV prevalence varied between 5% and 7.5% in Jamaica and St. Lucia respectively for another high risk group, crack cocaine users. (UNAIDS, 2008). Crack cocaine users regularly sell sex to support their habit and engage in unsafe sexual behaviors that increase both their own risk and the risk of their partners (UNAIDS, 2010a). Prisoners have also been affected by HIV in this region. HIV prevalence levels between 2% and 5% have been reported in the prison populations and detention facilities of St. Lucia and Guyana respectively due to the lack of consistent access to prevention and treatment in penal settings (UNAIDS, 2010).

### ***The Social Drivers of the Epidemic***

The HIV/AIDS epidemic in the Caribbean is largely driven by the countries' social, economic, cultural, and political circumstances. Stigma and discrimination are widely associated

with HIV/AIDS in the region and have been significant factors in the spread of HIV (UNAIDS, 2010a). One dominant view is that HIV/AIDS is a punishment for immoral behavior (UNAIDS & WHO, 2008). According to the 2010 Status of HIV in the Caribbean report, “so-called ‘deviant’ sexuality combines with fault to heighten stigma against MSM and gay men, ‘irresponsible, promiscuous’, persons living with HIV, and sex workers who engage in ‘sex-for-money’ ” (UNAIDS, 2010a). As a result, many people feel forced to hide their sexual orientations and practices and often refuse to disclose their HIV status to avoid being ostracized in their societies. Stigma and discrimination undermine HIV prevention, testing, treatment, the quality of care for PLHIV, as well as family, social, and community support. Fear of stigma can also homosexual men to have female partners as a way to hide their true sexual orientation further accelerating male to female transmission (USAID, 2011).

Gender discrimination is another factor contributing to the spread of HIV in the Caribbean. For many Caribbean countries, traditional gender roles are based on an ideology that favors feminine abstinence and virginity and which implies that women should be submissive allowing men to make decisions about engaging in sex (UNAIDS, 2010a). Consequently, women are less able to negotiate condom use and are far more vulnerable to sexual assault. Men, on the other hand, feel pressure to prove their masculinity by engaging in sex at any early age, having multiple sex partners, and using physical force against women (USAID, 2011).

In many of the Caribbean countries, a wide gap exists between generally high levels of HIV awareness and knowledge and the kinds of behaviors that can reduce the risk of HIV infection (UNAIDS & WHO, 2008). In surveys in the eastern Caribbean, more than 8 out of 10 respondents knew that consistent condom use protected against HIV infection, yet fewer than

half of sexually active men and only 1 in 5 women said they always used condoms with non-regular partners (CAREC, 2007b).

Additionally, tourism has contributed to the HIV/AIDS epidemic in the Caribbean in many ways. Since the 1970s, development efforts have largely focused on large-scale tourism investment and in recent decades, tourism has become the most important Caribbean industry. Studies suggest that tourism areas are now epicenters of demographic and social changes linked to HIV/AIDS risk such as transactional sex and increased alcohol and drug abuse (Padilla et al., 2010). Since tourism drives the economies of many countries, many local populations are seeking economic opportunities in tourism areas. Transactional sex, sex work, or other high-risk behaviors within these tourism areas increase in country migrants' vulnerability to HIV. Language and legal barriers make it challenging for migrants in many countries to gain access to services, particularly HIV testing and treatment (USAID, 2011).

### ***The Regional Response to the Epidemic***

Through blood safety and universal precautions, the Caribbean was successful very early in the reduction and control of these routes of HIV transmission. ART coverage has also increased substantially in the region, rising from 1% in 2004 to 51% in 2008 resulting in a 40% reduction in the number of AIDS-related deaths in that year (UNAIDS, 2010a). Programs for the prevention of mother-to-child transmission (PMTCT) have also grown and in December 2009, 59% of HIV-infected pregnant women in need of treatment were receiving it (USAID, 2011). Furthermore, much progress has been made in voluntary counseling and testing. In 11 Caribbean countries, more than 90% of pregnant women are tested for HIV every year. With respect to

pediatric AIDS treatment, coverage has reached 55% contributing to the reduction of AIDS-related mortality in this population (UNAIDS, 2010a).

Although the role and location of the coordinating bodies vary, all countries in the region have established national coordinating bodies as part of their response to the HIV/AIDS epidemic. For example, Barbados, Belize, the Dominican Republic, and Trinidad and Tobago have established national AIDS commissions under the leadership of the President or Prime Minister's Office while other countries maintain their HIV response units under their respective Ministries of Health. A 2009-2010 review of National Strategic Plans by the Pan Caribbean Partnership Against HIV/AIDS (PANCAP) showed that of the 16 countries, only 10 have plans, 8 have costed plans, 6 have implementation plans, and 5 have plans with monitoring and evaluation frameworks (UNAIDS, 2010a). In addition to national and regional responses, HIV/AIDS programs have also received support from multiple development partners including the U.S. Government and the Global Fund to Fight AIDS, Tuberculosis and Malaria (USAID, 2011). Since 2003, over \$US 1.3 billion was provided by donors to support the regional and country responses to HIV. In the mid 2000s, the Caribbean had extensive donor support from sources including from the Canadian International Development Agency (CIDA), Department for International Development (DFID), Deutsche Gesellschaft für Internationale Zusammenarbeit (GTZ), France, European Union, USAID, CDC, Kreditanstalt für Wiederaufbau (KfW) and the World Bank. Such external donors have played a critical role in assisting governments to respond (UNAIDS, 2010a). Yet, donor funding in the region is starting to decline due to the current global financial and economic situations since most countries are now classified as upper middle income (USAID, 2011).

## *Conclusion*

At the end of 2010, an estimated 34 million people (31,600,000 – 35,000,000) were living with HIV globally including 3.4 million (3,000,000 – 3,800,000) children less than 15 years of age. There were 2.7 million (2,400,000 – 2,900,000) new HIV infections in 2010, including 3690,000 (340,000 – 450,000) among children less than 15 years of age. Globally, the annual number of people newly infected with HIV continues to decline, although there is a stark regional variation. In sub-Saharan Africa, where most newly infected people live, an estimated 1.9 million (1,700,000 – 2,100,000) people became infected in 2010. This was 16% fewer than the estimated 2.2 million (2,100,000 – 2,400,000) people newly infected with HIV in 2001 and 27% fewer than the annual number of people newly infected between 1996 and 1998, when the incidence of HIV peaked overall in Sub-Saharan Africa. As presented in the UNAIDS 2010 Global Report on the AIDS Epidemic:

The overall growth of the global AIDS epidemic appears to have stabilized. The annual number of new HIV infections has been steadily declining since the late 1990s and there are fewer AIDS-related deaths due to the significant scale up of antiretroviral therapy over the past few years. Although the number of new infections has been falling, levels of new infections overall are still high, and with significant reductions in mortality the number of people living with HIV worldwide has increased (2010b).

As the region that has been more heavily affected by HIV than any region outside sub-Saharan Africa, the trend in the Caribbean is different. After almost 30 years, the HIV epidemic is still largely affecting MARPs and the number of new HIV infections has not significantly declined over the last 10 years. Moreover, HIV now affects women and men equally in the region. As



will explored further in Cuba, the Dominican Republic, and Haiti, poverty, unemployment, stigma, discrimination, and gender inequalities are all factors that have exacerbated the epidemic in the Caribbean and complicated the region's response.

## Chapter IV: HIV/AIDS in Cuba

El Niágara en bicicleta (Niagara Falls by bicycle).

A Cuban idiom

### *Background*

Figure 3. Map of Cuba



Source: National Geographic

As the largest and western-most island in the Caribbean, Cuba is comprised of the main island, Cuba, four archipelagos, and several smaller islands, with 11.1 million inhabitants (CIA, 2012). Situated at the key approaches to the Atlantic Ocean, the Gulf of Mexico, and the Caribbean Sea, Cuba is 90 miles south of the Florida Keys, 130 miles east of the Yucatán Peninsula, and 40 miles west of Haiti. Due to its strategic geographic location along one of the principal maritime passages in and out of the Caribbean, Cuba was considered the ‘Fortress of the Indies’ and ‘Key to the New World’ by Spain (Pérez, 2011). As the preeminent Spanish colonial possession in the Americas, Cuba emerged as a key point of commerce between the new world and the old world and developed several important industries of its own including tobacco,

coffee, and sugar. African slaves were brought in as early as 1513 to supply labor to Cuba's agricultural industries since Cuba did not have a sizeable indigenous population. By the mid-1800s, the combined totals of free and enslaved blacks accounted for more than 50% of the island's population (Sweig, 2009). Africans continued to be brought to Cuba until 1866 although slavery was not abolished until 1886. Today, it is estimated that between 30 to 60% of Cuba's population is at least partly descended from African slaves (Chomsky, 2011).

Once a former colony of Spain, Cuba was subsequently granted its independence by the U.S. at the end of the Spanish-American war in 1898 under the stipulation that the U.S. could intervene in the country's affairs and send in troops to enforce its will if necessary (Smallman, 2007). Indeed, the U.S. did not think that Cuba was prepared for self-governance or independence. In his 1899 message to Congress, U.S. President McKinley stated:

We have accepted a trust the fulfillment of which calls for the sternest integrity of purpose and the exercise of the highest wisdom. The new Cuba yet to arise from the ashes of the past must be bound to us by ties of similar intimacy and strength if its enduring welfare is to be assured...Our mission, to accomplish when we took up the wager of battle, is not to be fulfilled by turning adrift any loosely framed commonwealth to face the vicissitudes which too often attend weaker states (Pérez, 2011).

Despite the U.S. desire for a *Cuba Libre* and the pursuit of economic freedom, there was only adequate cooperation between Cuba and the U.S. for the next half-century, until the Cuban Revolution began in 1953. After multiple years and several attempts, Fidel Castro and his followers successfully overthrew the government of the President General Fulgencio Batista in 1959. In the first few years of power, Castro's government had seized private land, nationalized

U.S companies, and heavily taxed American products. The Eisenhower administration responded by initially suspending all sugar imports from the island followed by President Kennedy's embargo on the movement of goods and people between the two countries that still exists today. After several unsuccessful attempts to overthrow and assassinate communist Castro, there was a threat of a nuclear war by the Cuban missile crisis after Cuba accepted the Soviet Union's offer to build missile bases on the island (Smallman, 2007).

In the years following the start of the Cuban revolution, Castro focused his efforts on education, employment addressing racism, and supporting women's rights in addition to having a strong commitment to health care. He and his followers believed that the purpose of their revolution was to not only realize José Martí's dream of full independence, but to ensure that all Cubans could live with a degree of material and social dignity (Sweig, 2009). With respect to health, Castro not only saw health care as a universal right all Cubans were entitled to but felt competition with the United States in particular to have one of the best health care systems in the world. Seeking to become a 'world medical power', the Cuban government saw health care as a measure of political success. Therefore, the country's health system became a national priority:

The central metaphor of Cuba's anti-imperialist struggle as recounted in this analysis is that of health. The health of the individual counted is a metaphor for and symbol for the health of the 'body politic,' and in which the achievement of the status of 'world medical power' is synonymous with victory over the imperialists. Medical doctors are the protagonists in this war both at home and abroad. They are warriors in the battle against disease, which is largely considered a legacy of imperialism and underdevelopment. Cuba, a David fighting Goliath (the United States), seeks to slay the giant in the battle for international prestige in health care (Smallman, 2007).

Although nearly half of Cuba's doctors fled the country after the revolution, Cuba managed to create an integrated national health plan that initially provided a high level of service for free to all Cubans. As health care before the Cuban revolution has been concentrated in urban areas, the new government created the Rural Health Service in January 1960, establishing rural health facilities and requiring every medical school graduate to spend a year doing social service work in an underserved rural area. Dental service was added in 1961 (Feinsilver, 1993). By focusing on health care, research, and innovative biotechnology, Cuba would successfully eliminate many infectious diseases such as polio in the latter half of the twentieth century (Smallman, 2007). Today, the life expectancy at birth is 75 and 80 years for men and women respectively and is the highest in Latin America (CIA, 2012).

### ***The Cuban Response to HIV/AIDS***

When HIV/AIDS was first reported in Cuba in the 1980s, the government immediately blamed the United States for inflicting AIDS upon the region. In a 1988 speech, Castro asked, "Who brought AIDS to Latin America? Who was the great AIDS vector in the Third World? Why are there countries like the Dominican Republic, with 40,000 carriers of the virus, and Haiti, and other countries of South and Central America—high rates in Mexico and Brazil and other countries? Who brought it? The United States, that's a fact" (Leiner, 1994). Yet, fifty six of the early HIV cases in Cuba were either among soldiers who had returned from service in Africa or among people who had contracted the disease abroad while on aid missions, almost none of whom had ever been to the United States (Rosenfield & Herbran, 2003). Despite this, there was strong resentment towards Americans, especially homosexual American men, for spreading the disease.

Even before the first Cuban AIDS case was diagnosed in late 1985, Castro launched a nationwide AIDS education program in 1983 to establish early diagnosis as a central strategy for prevention and treatment (Díaz et al., 2011). The Cuban government also implemented a number of other awareness and prevention programs early on to successfully combat and contain the spread of the disease. This became especially important as the tourist industry began to grow in Cuba as did the resurgence of the sex trade industry due to the economic trade crisis (Sweig, 2009). Indeed, Cuban authorities acted both swiftly and decisively to the HIV/AIDS epidemic even when little was known about the mystery illness. Their response was based on traditional infectious disease control and included an epidemiological surveillance system, contact tracing and screening of at-risk groups, combined with intensive research and development.

In 1986, the Cuban government made the decision to move forward with quarantine based on a 1982 law that allowed for isolating those carrying an infectious disease that presents a public health threat (Anderson, 2009). The first sanatorium was located in the province of Havana but more were soon established in other parts of the island. Stigma and fear of HIV/AIDS, especially in the early years of the epidemic when little was known about the disease, led to general support of the sanatoriums. By 1988, there were 190 HIV-positive cases and seven deaths in Cuba. At that time, an equal number of men and women were infected; homosexual and bisexual men were a minority (21% of all cases). Those who were quarantined were mostly heterosexual men and women (Galbán, de Quesada Ramírez, & Cádiz Lahens, 1989). Quarantine was thought to be the most effective way of delivering the comprehensive medical, psychological, and social care needed and limiting the spread of the disease; however, as more became known about the pathology of the disease, public health understanding and

Cuban policy began to evolve. As of 1993, an ambulatory care system made quarantine treatment an option rather than an obligation (Pérez et al., 2004).

In addition to quarantine and the emergence of a number of education programs, mandatory testing also helped to contain HIV rates in Cuba. Testing began in 1986 and was expanded the following year to include vulnerable groups—pregnant women, health workers, blood donors, and those who had traveled to areas with a high incidence of the disease (Pérez et al., 2004). All sexual contacts and partners of HIV-positive persons were traced. By February 1988, it was estimated that 25% of the sexually-active Cuban population had been tested with positive results among nearly 4% of the contacts who had been traced and tested (Galbán, de Quesada Ramírez, & Cádiz Lahens, 1989). By 2003, about 1.6 million tests were conducted in Cuba which has a total population of 11 million (Pérez et al., 2004).

The availability of drug treatment for HIV/AIDS patients was limited, largely as a result of the economic hardships of the 1990s and because of the US embargo. Initial recommendations included immune system boosting drugs and in 1987 zidovudine (ZDV) was recommended for all those who developed AIDS (Anderson, 2009). In 1996, Cuba purchased ART drugs for all children with AIDS and their mothers at a cost of US\$14,000 per person per year after the International Conference on AIDS and the recommendation for HAART. Although NGOS began donating enough ART drugs to treat 100 AIDS patient around this time, the purchase of ART by the Cuban government further strained the country's already limited resources following the economic crisis (Pérez et al., 2004). By 2001, Cuba had manufactured its own generic versions of antiretroviral drugs and foreign assistance for HIV drugs was no longer needed except for procuring Western blot test material (Anderson, 2009).

### *The Current Picture*

Although the Cuban quarantine policy has been harshly criticized by global media, human rights advocates, and public health specialists, the combination of quarantine, educational programs, and mandatory testing have all contributed to Cuba's success in containing the HIV/AIDS epidemic. In comparison to the other countries in the region, Cuba has an exceptionally low prevalence rate (0.1%) and low rate of AIDS-mortality (UNAIDS, 2010c). Despite a slight increase in newly-reported HIV infections since the late 1990s among homosexual and bisexual men, Cuba ranks as one of the 51 countries with an infection rate less than 0.2% globally (Anderson, 2009). HIV prevalence in the provinces of Isla de la Juventud and of Ciudad de La Habana is 0.18% and 0.13% respectively which is higher than the national adult HIV prevalence rate estimated to be less than 0.1% (WHO, 2008). HIV primarily affects men and in particular MSM who represent more than 72% of all diagnosed cases (UNAIDS, 2010c) although the WHO reports increasingly that more women are being infected with HIV (WHO, 2008). The primary pathways of HIV infection are different from other countries in that transmission by intravenous drug use is extremely rare, as is transmission from mother-to-child or via blood or blood derivatives. HIV is a largely urban and male epidemic, with 99% of cases contracted through sexual relations (Gorry, 2011).

In recent years, the UN has recognized the extremely low infection rates in Cuba hailing the island's program as "among the most effective in the world" (Sweig, 2009). Cuba is the only country in the Caribbean with universal access to ART (WHO, 2008). Although Cuba has continued to experience financial troubles as a result of the global economic crisis and the ongoing U.S. embargo, treatment in Cuba including ART medication continues to be free. In 2010, over 5,600 people received ART in Cuba, an increase in excess of 10% increase f over



2009 figures (Gorry, 2011). The Cuban government estimates it costs \$6,000 annually to treat each person with HIV/AIDS (Rodríguez, 2011). All PLHIV are confidentially registered with the National Center for Epidemiology. Although there are some complaints about testing requests and tracing of sexual contacts, an emphasis on the infected person's social responsibility takes precedence over the individual right to abstain from epidemiological tracing (Anderson, 2009).

Despite efforts to contain the spread of the HIV/AIDS and to improve quality of life for those living with the disease, HIV/AIDS continues to present challenges to the Cuban health system and the country's at-risk population. HIV prevalence is starting to slowly increase because people are living longer but also because the number of reported HIV cases is on the rise. Additionally, Cubans are now more open to testing than ever before and in order to obtain treatment despite the risk and fear of being stigmatized. It is estimated that between 2009 and 2010, incidence rates increased from 13.9 to 16.2 per 100,000 (Gorry, 2011). The 2009 Survey on HIV/AIDS Prevention Indicators conducted by the National Statistics Bureau's Center for Population and Development Studies indicated the following among 29,000 Cubans:

- 37% of the respondents perceived some personal risk of contracting HIV;
- 78% of MSM had used a condom during their last casual sexual encounter, compared to 72% of the total sample surveyed;
- 63% of men responding and 32% of women expressed severe or moderate prejudice against MSM;
- 29% of men and 24% of women expressed severe or moderate prejudice against PLHIV; and

- 64% of MSM and 73% of sex workers reported consuming alcohol, compared to 46% of the total sample surveyed

The survey narrative presents several conclusions including that personal risk perception of contracting HIV by both male and female respondents is low, condom use is more frequent among MSM than the general population and is on the rise, alcohol consumption could be linked to increased risk of contracting HIV, and MSM are more likely to encounter prejudice than PLHIV (Centro de Estudios de Población y Desarrollo, 2010).

### ***Conclusion***

Although Cuba's experience has demonstrated that a national strategy and universal access to testing and treatment are fundamental for effective HIV/AIDS management and control, the rising HIV prevalence raises concerns for the future. The epidemiological profile of infection has shifted from heterosexual transmission to that of MSM. Traditional female roles and beliefs about masculine identity in Cuba, especially machismo, have an impact on women's ability to negotiate condom use and use of health services. Such social constructs have also contributed to homophobia resulting in MSM hiding their sexual orientation (Gorry, 2001). More women are likely being infected with HIV in Cuba because it is not uncommon for MSM to also have sex with women (WHO, 2011). How Cuba will sustain its success moving forward will depend on whether the nation can improve its prevention efforts to focus on the at-risk populations and create education campaigns to not only increase HIV/AIDS awareness but to reduce stigma and promote acceptance of sexual diversity as well.

## Chapter V: HIV/AIDS in the Dominican Republic

E' palante que vamo. (We are going to move forward)

Dominican saying

### *Background*

Figure 4: Map of the Dominican Republic



Source: National Geographic

As the second largest island in the Antilles, Hispaniola is located between Cuba and Puerto Rico and is the only Caribbean island divided between two countries; the Dominican Republic and Haiti. Hurricanes and earthquakes are common occurrences for Hispaniola, some of which have destroyed entire cities forcing populations move to other locations or rebuild entirely (Pons, 2010). The Taínos were the indigenous habitants of Hispaniola before the arrival of Christopher Columbus and the Europeans in 1492. Similar to Cuba, Hispaniola helped spur Spanish conquest of the Caribbean and of the American mainland. Spain ruled the island until 1697 when the Spanish formally ceded to the French the western third of the island which would become known as Haiti in 1804 (CIA, 2012). The remainder of the island, known as Santo Domingo, continued to be ruled by the Spanish until the French took control in 1801 followed by

the Haitians in 1809. During this time, Haiti emerged as a plantation society that was heavily dependent on the exploitation of slaves whereas the Dominican Republic relied on cattle ranching. This not only affected the economies of the two countries, but also profoundly impacted race relations. Dominicans began to embrace their Spanish identity and mixed race whereas Haitians accepted their African heritage and black race. When Santo Domingo finally gained its independence in 1844 as the Dominican Republic, this solidified the idea of Dominicans and Haitian being separate peoples (Pons, 2010)

After voluntarily returning to the Spanish Empire in 1861, the Dominicans launched a war that restored their independence in 1865. Political strife continued into the next century and ultimately led to the dictatorship of Rafael Trujillo in 1930 (CIA, 2012). A former sergeant in the Dominican army trained by the U.S. Marine Corps, Trujillo was initially supported by the U.S. who considered him a better option than his enemies; however, relations changed during his several decades of repressive rule. During this period, Trujillo expropriated property and businesses for himself and his family and renamed the capital city Ciudad Trujillo and the country's highest mountain Pico Trujillo. Anyone who opposed Trujillo was imprisoned, tortured, or murdered (BBC, 2011). In an attempt to stop Haitians from migrating to the Dominican Republic and occupying land near the border of the two countries, Trujillo launched a brutal massacre of Haitian laborers living in a disputed border area which 18,000 Haitians were killed in 1937. Trujillo wanted the murder of the Haitians to look like a border disagreement between Dominicans and Haitians but the truth is it was an act of genocide and anti-Haitianism (Pons, 2010). Indeed, Trujillo's rule is considered one of the most brutal periods in the history of the Dominican Republic that extended until his assassination in 1961.

After the collapse of dictatorship, Juan Bosch was elected president in 1962 but was quickly overthrown in a military coup in 1963. Although the U.S. led an intervention to restore Bosch in 1965, Joaquín Balaguer became president after defeating Bosch in an election. Balaguer remained in power for the next 30 years (CIA, 2012). Although Balaguer was somewhat successful in rehabilitating the country's economy, the Dominican Republic's economic and financial situation only worsened by the 1990s. At the beginning of 1991, the country still had an authoritarian and corrupt political system and lacked social security or adequate education and healthcare (Pons, 2010). Balaguer's power came to an end in 1996 when Leonel Fernández was elected as president. Since then there have been regular competitive elections held in the Dominican Republic in which opposition candidates have won the presidency. Most recently, Fernández was reelected to a second consecutive term in 2004 and still remains president today (CIA, 2012).

It was not until after the Trujillo era that the Dominican Republic became a tourist destination among American travelers whose negative image of the country had reflected its violent political system. Development efforts since the 1960s pushed mass tourism investment in the country which has led to rapid growth in the gross domestic product due to tourism (Padilla et al, 2009). By 1984, tourism displaced sugar as the country's major industry. At present, the Dominican Republic has become one of the main tourist destinations in the Caribbean region, with 4 million international tourists arriving annually (Cabezas, 2009). Despite a high per capita income, economic growth in the Dominican Republic has not benefited the majority of the population. As a result, the country continues to suffer from high income disparities and poverty rates in addition to poor health and education outcomes. The Dominican Republic also has some of the highest rates of infidelity and exportation of sex work due to the

Dominican Republic's popularity as a tourist destination coupled with increasing levels of sex tourism (PSI, 2011). As the government has been funneling many of its resources into building the necessary infrastructure for tourism and promoting hospitality services, the country has invested less in health and education. Consequently, the state is forced to rely on international aid to implement various education and health programs as well as social infrastructure projects (Cabezas, 2009).

### ***The Dominican Response to HIV/AIDS***

In 1983, the Dominican Republic and Haiti became the first countries in Latin America and the Caribbean region to report HIV/AIDS cases. The Dominicans largely blamed the country's epidemic on migrant Haitians who were working as laborers in sugar plantations known as *bateyes* (Smallman, 2007). Writing about the complex "problem" of Haitian immigration to the Dominican Republic former President Balaguer asserted:

The commerce with the lowest of Haitian immigration has retarded, in large part, the social evolution of Santo Domingo extending to the inferior classes of its population is the most repugnant diseases. A large part of the Negroes that immigrate to Santo Domingo are handicapped beings because of depressing physical defects. Few of them know of hygiene and their infiltration among the native population has brought about a decline in the sanitary indicators in our rural zones (Balaguer, 1983).

Indeed, Balaguer's words reflect a history of tense ethnic relations and a long tradition in which Dominicans have denigrated their Haitian neighbors. One of the first studies of HIV prevalence in the Dominican Republic reported that persons designated as Haitians and homosexuals or

bisexuals were the primary victims of the country's first AIDS cases with HIV prevalence rates of 10% and 19%, respectively (Koenig et al., 1987).

Since the first AIDS cases were reported in the Dominican Republic in the early 1980s, the government has responded aggressively to the HIV/AIDS epidemic. In 1987, the Dominican government launched a National AIDS Program that would lead to the growth of various non-governmental organizations (NGOs) and other HIV prevention activities (Halperin et al., 2009). Despite initial attempts to respond to the HIV/AIDS epidemic, the prevalence of HIV quickly increased and reached more than 2.5% of the adult population by 1999 (Smallman, 2007). In 2000, the Presidential Council on AIDS (COPRESIDA) was established to coordinate the HIV/AIDS National Strategic Plan for the Prevention and Control of HIV/AIDS and STDs. COPRESIDA's activities include implementing public policies, conducting prevention campaigns, providing care and treatment for PLWHA, promoting private sector involvement in response to the epidemic, and reducing stigma and discrimination. The Ministry of Health (MOH) implements HIV/AIDS services and provides diagnostic tests in the public sector whereas the National AIDS Program (NAP) develops HIV/AIDS-related norms, protocols, and surveillance (USAID, 2010).

In 2001, the estimate of adult HIV-1 prevalence in the Dominican Republic peaked at 2.7% (UNAIDS, 2002). The country then began to improve its national surveillance methodology and implemented the Demographic and Health Survey (DHS) in 2002 to collect additional health data. The official country estimate was subsequently revised to 1.1% in 2006. Heterosexual intercourse has been reported to be the primary form of transmission of the disease, accounting for 76% of HIV infections according to CDC in 2007. However, with such a strong stigma against homosexuality and even same-sex behavior in the Dominican Republic, it is likely

that the number of infections resulting from men having sex with men has been underreported (Halperin et al., 2009). To address HIV treatment, the government began providing HIV testing free of charge and administering free ART for PLHIV since 2003; however, ART coverage rates were still low at 38 percent in 2007. Moreover, ART coverage rates are low for children, at less than 45 percent of those who need ART are receiving it (USAID, 2010).

### ***The Current Picture***

Today, the Dominican Republic has the largest number of PLHIV in the Caribbean after Haiti. The primary affected groups include MARPs such as, women with four or fewer years of formal education, and residents of the *bateyes*. Although HIV infection levels vary considerably among women, poorly educated women and *batey* residents are 8.3% and 1.1% of the general population, respectively. Yet, poorly educated women and *batey* residents represent 23.7% and 4.5% of PLHIV. The Dominican Republic's epidemic is also driven by sex workers and their clients and partners, MSM, and injecting drug users (IDUs). According to the 2008 Behavioral Surveillance Survey (BSS), HIV prevalence was 4.8% among female sex workers, 6.1% among MSM, and 8% among IDUs (USAID, 2011). Tuberculosis (TB) is the largest opportunistic infection for PLHIV. PAHO estimates that over 100 persons per 100,000 are infected with TB in the Dominican Republic versus 2.6 per 100,000 in Barbados and 4.9 per 100,000 in Jamaica. The 5,320 reported TB cases in the Dominican Republic are among the highest in the Latin America and Caribbean region (Marquez & Montalvo, 2011).

Although prevention efforts have been partially successful in the general population resulting in a steady decline in HIV prevalence in the Dominican Republic over the years, high prevalence rates still persist among MSM and commercial sex workers. Because of multiple sexual partners, commercial sex workers, especially those from disadvantaged socioeconomic



settings, are particularly vulnerable to HIV infection and other sexually transmitted infections (STIs) (Ghys et al. 2001). Epidemiological studies from many countries have documented significantly higher rates of HIV infection among commercial sex workers, as compared to other population groups within the same geographic area and cultural context (Asamoah-Adu et al. 2001; Quan et al. 2000; Mehendale et al. 1995). Although the Dominican Republic is a relatively small country, the number of CSWs has been conservatively estimated at 60,000 to 100,000, indicating that a substantial number of men and women are at increased risk for HIV infection because of multiple sex partners (AIDSCAP/FHI 1993; COIN 1998). As Fadual et al affirm in the case of the Dominican female sex workers, “The pervasive sexual interaction of Dominican female sex workers with foreign male tourists during their vacations is a breeding ground for HIV/sexually transmitted disease (STD) transmission between local women and North American and European males in the Caribbean” (1992). Similar patterns are suggested among male sex workers, although data are more limited for this population most likely because of a strong social stigma against MSM which increases the likelihood that bisexual individuals will self-identify as heterosexual (Padilla, 2007).

Considerable efforts by the Dominican government, particularly condom promotion and STD management activities, have enabled commercial sex workers to protect themselves as well as their clients and partners against HIV infection (Padilla et al., 2010). For example, in Santo Domingo, prevalence among FSWs has been decreasing over the past decade and is approaching the same level as among pregnant women nationally. This may be attributable to the successful implementation of the “100% Condom Strategy” by two NGOs in several provinces as well as the USAID and Dominican Republic condom social marketing program that targets commercial sex workers and has established more than 1,000 sales outlets throughout the country (USAID,

2010). Yet, many commercial sex workers continue to engage in risky sexual behaviors as evident by a long-term research study on Dominican tourism labor. Of the 118 male sex workers who indicated that they had regular male clients, 14% said that they never used condoms with their last regular client, a risk behavior that is likely attributable to a feeling of *confianza* or trust (Padilla et al., 2010). In addition, female sex workers who will often build relationships with their clients and refer to them as *novios* or boyfriends, stop condom use after only a few encounters (Kerrigan, Moreno, Rosario & Sweat, 2001).

Currently, the Dominican government works with a number of international donors to combat HIV/AIDS, including the William J. Clinton Foundation, UNICEF, the United Nations Population Fund, the World Bank, and the Global Fund. USAID, in collaboration with U.S. President's Emergency Plan for AIDS Relief (PEPFAR), is the lead bilateral donor in the Dominican Republic. Its efforts include supporting NGOs to implement prevention activities while strengthening the government's voluntary counseling and testing (VCT) and prevention of mother-to-child transmission (PMTCT) programs (USAID, 2010). The most difficult challenge for the Dominican Republic is long-term HIV/AIDS program sustainability since the country's national response is dependent mostly on external funds. In contrast to Cuba, the Dominican Republic does not have universal access to health care nor does it have a strong health care system (UNAIDS, 2009). Although the government has been administering free ART for PLHIV since 2003, international donors fund ART rather than the national budget. Furthermore, the government has not made a commitment to provide additional funding for ART (USAID, 2010).

## ***Conclusion***

As compared to other countries in the Caribbean region, the Dominican Republic is diverse in terms of its history, politics, economic conditions, gender roles, and sexual practices. Political turmoil, poverty, machismo, and lack of knowledge among MARPS on how to protect against HIV, are all important factors into considering why the HIV-AIDS pandemic has affected this particular island nation so profoundly and how commercial sex and sex tourism has further worsened the spread of the disease. As tourism continues to grow in the Dominican Republic, CSWs are going to be an increasingly important target group for HIV prevention programs. The aim of such programs should be to safeguard the health of CSWs and avert thousands of potential new infections among their sexual partners. Unless current trends among MARPs are reversed, any prevention gains thus far will ultimately become eroded. The HIV/AIDS epidemic will not only decrease life expectancy in the Dominican Republic but will also have a substantial negative impact on any future economic growth.

## Chapter 6: HIV/AIDS in Haiti

Bèyè mòn gen mòn. (Beyond the mountains, more mountains)

Traditional Haitian Saying

### *Background*

Figure 5: Map of Haiti



Source: National Geographic

Haiti is very much tied to the Dominican Republic in terms of its geography, history, and heritage. Located on the Western half of Hispaniola, Haiti comprises one-third of the island that it shares with the Dominican Republic. Prior to being Christopher Columbus landing in 1492, Hispaniola was inhabited by the Taínos who practically became nonexistent after the Spanish took over the island. French settlers then came in the early 17<sup>th</sup> century and eventually gained control of the western third of the island that later became Haiti after it was relinquished by Spain in 1697 (CIA, 2012). For the next century, Haiti relied heavily on the importation of African slaves to grow sugar, rum, coffee, and cotton on large plantations. An estimated 500,000 people of western African origin were enslaved during this time. The country emerged as the

world's main producer of sugar and as one of the richest colonies in the New World largely because of its exploitation of slaves. Between 1791 and 1803, nearly half a million slaves rebelled against the French under the leadership of Toussaint L'Ouverture. L'Ouverture emerged victorious in 1804 and Haiti became the first black republic to declare its independence (Buss, 2008).

The immediate years after Haiti gained its independence were tumultuous. General Jean-Jacques Dessalines, a general in L'Ouverture's army, became the country's first ruler. Fearing that the French would return to Haiti and reverse emancipation, Dessalines expelled white settlers, oppressed mulattoes, confiscated lands, and ordered the massacre of thousands of French people (Rotberg, 1988 and Bell, 2007). In the process of ending slavery in Haiti, Dessalines halted the slave plantation economy that was the key to Haiti's wealth and created a free but poor peasant society. Freed slaves refused to work the land for others which subsequently caused the most profitable colony in the history of colonization to falter because simply the labor was not there (Buss, 2008).

Haiti faced even more challenges after defeating the French militarily. There were bitter divisions within Haitian society between a mulatto class who associated themselves with French culture and a black underclass that resented the mulattos' power. A 13-year civil war persisted from 1807 to 1820 between the northern region dominated by blacks and the southern region dominated by mulattos. After Spanish Santo Domingo became independent in 1821, ruler Jean Pierre Boyer immediately invaded the other side of Hispaniola and unified the island. In 1825, the French finally recognized Haiti's independence but demanded reparations of about \$22 billion (in 2007 USD dollars) for French property lost, confiscated, or destroyed during Haiti's fight for independence. Successive Haitian governments actually paid towards this indemnity

but it resulted in a bankrupted treasury and constant poverty that was felt throughout the following century (Corbett, 1994).

In 1844, the Dominican Republic declared its independence from Haiti. From 1806 to 1879, there were 69 revolts against the Haitian government followed by more attempts to overthrow the government in early years of the next century. Meanwhile, trade embargos, blockades, and a systematic degradation of the Haitian people by the U.S., France, and other countries further crippled the Haitian economy. In 1915, the U.S. began an illegal nineteen-year occupation of Haiti to try to maintain order and encourage democracy (Buss, 2008). Many Haitians resented the American occupation and after a series of riots in 1929, the U.S. finally withdrew in 1934 without preparing Haiti for self-governance. According to a presidential commissioner of 1930, the American occupation was “a brusque attempt to plant democracy by drill and harrow” and further criticized the U.S. for failing to train Haitians for self-governance or to even understand the country’s own problems (Spector, 1984). Indeed, the U.S. occupation resulted in political, economic, and social instability that continued to plague Haiti for the next several decades.

Following the U.S. occupation, Haiti suffered a succession of brutal, corrupt, and despotic leaders. After several attempts to move forward democratically ultimately failed, black Haitian François “Papa Doc” Duvalier was elected president in 1957 and in 1963, extended his term and declared himself president for life. The Duvalier dictatorship marked “The Reign of Terror” and one of the saddest chapters in Haitian history with thousands of Haitians murdered, tortured, or unjustly imprisoned. To keep his followers loyal, Duvalier distributed public money, jobs, and benefits to them at the expense of the country (Buss, 2008). Stealing millions of dollars in foreign aid, he created an informal police force, the Tontons Macoutes (Creole for

“bogeyman”) to protect his regime. Like Trujillo in the Dominican Republic, Duvalier was backed by the American government despite his corrupt and brutal tactics because he was a loyal ally against communism (Smallman, 2007). In 1971, Duvalier died in office and power was transferred to his nineteen-year-old son Jean-Claude “Baby Doc” Duvalier who continued to sustain a repressive dictatorship until he was expelled in 1986 (Buss, 2008).

Tourism, which had become increasingly important to Haiti’s economy during the 1970s, became the country’s second largest source of foreign currency by 1980 (Farmer, 2010). But ongoing violence and economic chaos led to many Haitians to migrate elsewhere including the U.S. It was during this time that Haiti was surmised to be the source of the HIV/AIDS epidemic a report that subsequently discouraged foreign investment and tourism (Buss, 2008). Widespread fear of HIV/AIDS quickly and dramatically affected tourism in Haiti. The Haitian Bureau of Tourism estimated a sharp decline from 75,000 visitors in the winter of 1981-82 to fewer than 10,000 the following year (Farmer, 2010). After “Baby Doc” fled Haiti, much of the Haitian economy crashed due to widespread unrest and political turmoil. A military junta seized power in 1987 which led to even more political unrest and brutal repression that worsened the country’s basic social services (Buss, 2008).

After the three-year military junta, Jean-Bertrand Aristide was elected president in the nation’s first democratic election after receiving nearly 70% of the vote. A former priest, Aristide was ousted from office in 1991 by a violent military coup which displaced thousands of Haitians and killed as many as 4,000 people mainly in Haiti’s urban areas. The UN, the Organization of the American States, the U.S. and the international community embargoed trade with the country ruled by the junta. Although the embargoes were not very effective in influencing the military, they seriously damaged the country’s economy and made the lives of

the poor people even worse (Vasquez, 1992). The coup regime collapsed in 1994 under pressure from the U.S. and the threat of force. Aristide, agreeing to reinstate several reforms, became president again from 1994 to 1996 and from 2001 to 2004. He was then unexpectedly ousted in 2004 and forced out of the country after a bloody rebellion and pressure from the U.S. and France after Aristide's commitment to democratic principles were questioned. There were allegations of electoral irregularities, ongoing extra-judicial killings, torture, and brutality (BBC, 2011). During this period, drug trafficking became a major issue in Haiti. According to some estimates, "Haiti greatly scaled up cocaine trans-shipments to the U.S. via Columbia by as much as 5 to 15%" (Whitman, 2005). Despite U.S. concerns, the Haitian government either failed to sign or enforce any formal agreements with the U.S. on narcotics control and law enforcement (Stromesen & Trincellito, 2003). Following Aristide, a transitional government took over until the Haitians elected René Préval as president in 2006; however, the election was marred by charges of fraud and accompanied by mass demonstrations and violence (Buss, 2008). Since then, an elected leadership has taken over and a UN stabilization force has been deployed. Haiti is still plagued by violence among gang rivals and political groups. The UN has described the human rights situation as "catastrophic" (BBC, 2012).

In January 2010, a magnitude 7.0 earthquake struck Haiti, killing an estimated 217,000 people, injuring approximately 300,000 and displacing over 1 million people, according to the United Nations Office for the Coordination of Humanitarian Affairs. An estimated half a million people have been forced to leave the capital, Port-au-Prince, and migrate to other areas of the country that were not as directly affected by the quake (UNAIDS, 2010d). The earthquake came after Haiti had just experienced four hurricanes within a 30-day period in 2008. Prior to this series of events, a tropical storm in 2004 caused massive flooding, displaced populations, and led



to the deaths of as many as 3,000 people. Following several natural disasters in a short period of time, the 2010 earthquake hit Haiti hard and was incredibly devastating (Malow et al., 2011). More than 1 million people lost their housing and are living in 700 camps or with host families. National authorities estimate that over 500,000 people have moved from earthquake affected areas to other regions, mainly rural areas with inadequate infrastructure and services (UNAIDS, 2010d).

### ***The Haitian Response to HIV/AIDS***

The two earliest cases of HIV/AIDS in Haiti date back from 1978 and would increase dramatically in 1980; however, it was not until cases appeared among Haitian migrants in the U.S. in the 1980s that HIV/AIDS in Haiti began to draw international attention (Farmer, 1992). In 1982, Dr. Jean Pape, an internationally recognized infectious disease expert, founded The Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infections (GHESKIO), in Port-au-Prince. The activities of the center became the forefront of AIDS prevention strategies, clinical service, research, and training (Malow et. al, 2010). By 1983, the CDC referred to AIDS as the "4H disease" because of the four risk groups that were associated with the disease: Haitians, homosexuals, hemophiliacs, and heroin users (Cohen, 2006). Being singled out as a risk group had serious stigmatizing impacts as not only sufferers of HIV but for all Haitians who were branded as AIDS carriers (Farmer, 2010). Pape and several co-authors then published a landmark report in the New England Journal of Medicine (NEJM) on the first cases of AIDS in Haiti and noted the same risk factors as Americans: men having sex with men, recipients of blood products, links to sex workers, and high rates of venereal diseases (Cohen, 2006).

Yet, the notion that Haitians were for some reason at a higher risk of acquiring the disease continued to persist. Many Americans associated Haitian voodoo rituals, extreme poverty, social chaos, and the swine flu among Haitian pigs to be believable sources of AIDS (Farmer, 2010). Prejudice against Haitians led to widespread economic and social repercussions as the Haitian tourism industry collapsed. The response of the government was rash. The Haitian government raided gay bars and institutions, arresting gay men and expelling all foreigners who owned businesses that catered to a gay clientele (Smallman, 2007). As historian Elizabeth Abbott observed, “AIDS stamped Haiti’s international image as political repression and intense poverty never had” (1988). Haitian communities in the U.S. were also negatively affected by the association. It became difficult for Haitians to find work and many encountered discrimination in their everyday lives (Smallman, 2007).

At the start of the epidemic, HIV/AIDS was viewed as a “city sickness” by Haitians as the disease spread very quickly among Haiti’s urban poor. Poor city dwellers were most at risk during the early years of the epidemic as HIV infection became widespread and more prevalent in urban areas and in lower socioeconomic groups (Schoepf, 1993). Although many of the early cases were among men having sex with men, HIV quickly moved to the heterosexual population and “by 1986 homosexuals or bisexuals accounted for only 7% of male Haitian AIDS cases, and 40% of total cases were women” (Sabatier, 1988). Women in Haiti’s urban slums were especially affected. According to a study conducted in Cité Soliel, a slum-city of more than 100,000 people bordering the capital, the HIV-positive rate among pregnant women increased from 8.9% in 1986, to 9.9% in 1987, and 10.3% in 1988 (Boulos et al., 1990). By the early 1990s, HIV had become a disease that infected far more women than men in Haiti and it

gradually spread from urban to rural areas as many women turned to prostitution to survive (Farmer, 1990).

During its early history, Haiti significantly relied on foreign aid to deal with HIV/AIDS. The disease hit a country with virtually no public health system, a poor doctor/patient ratio in rural areas, a widespread tuberculosis epidemic, few government resources, and political chaos (Smallman, 2007). Consequently, the rate of HIV disease progression for PLHIV in Haiti was almost twice as high as that in developed countries. Key factors that likely contributed to the increase were poor nutrition, high prevalence of community-acquired infections including respiratory tract infections and acute diarrhea, as well as high rates of active tuberculosis (Cayemittes et al., 2001; Deschamps et al., 2000). Hospitals and sanatoriums became full with large numbers of *moun SIDA*, as persons with AIDS were labeled. With the mounting evidence that HIV/AIDS was becoming a large and growing epidemic, Haitian health officials conceded that AIDS or *SIDA* was a major public health problem and not a public relations issue as previously thought (Farmer, 2010).

The national response to HIV in Haiti has largely been implemented by national and international nongovernmental organizations, including Partners in Health (PIH), GESKIO, Médecins sans Frontières, Institut Haïtien de l'Enfance, the Clinton Foundation, Centre de Développement et Santé, Volontaires d'Haïti and Plan International. Since the Haitian health care system is practically nonexistent, PIH has been addressing the health care needs of the residents of some of the poorest areas in Haiti since 1987. In 1998, PIH launched the world's first program to provide free, comprehensive HIV care and treatment in Haiti (PIH, 2012). GHESKIO became the world's first clinic devoted to treating patients with HIV/AIDS and provides an integrated program for the diagnosis and treatment of HIV/AIDS, tuberculosis, and

STIs (Koenig, 2010). National coordination efforts, supported by the UNAIDS Secretariat, the Cosponsors and other development partners, have received significant financial support from the US President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) during the past several years (UNAIDS, 2010a). When PEPFAR was initiated in 2004, under the U.S. Global HIV/AIDS Initiative, \$13 million was allocated to Haiti; in 2005, \$39.4 million, and in 2006, \$47 million (Buss, 2008). In 2006, Haitian authorities, along with the continued help and support of many organizations such as PIH and UNAIDS, released and implemented nationwide goals for HIV prevention, care, treatment. Following these objectives, 68 sites providing antiretroviral therapy and 117 sites aimed at preventing mother-to-child HIV transmission were established. In addition, a strong national network of people living with HIV and a national HIV monitoring system were created (UNAIDS, 2010d).

### ***The Current Picture***

Today, Haiti remains the most impoverished and unstable country in the western hemisphere and one of the poorest in the world (UNDP, 2005). Most adults are unemployed and more than 70% live in what the U.N. defines as extreme poverty. Many Haitians lack safe drinking water and sanitation facilities. Furthermore, 40% of Haitian households are without adequate food and shelter (Gage & Hutchinson, 2006). Only 28% of Haitians have access to health care, and only 3% have health insurance. NGOs account for 70% of health-care services offered in rural areas and deliver four-fifths of public services (Buss, 2008). With 1.9% of adults estimated to be HIV positive, Haiti has one of the highest prevalence rates and is the largest epidemic in the Caribbean in terms of PLHIV (USAID, 2011).

Similar to other countries in the Caribbean, there are substantial differences in the burden of the epidemic in Haiti. In 2010, The United Nations General Assembly Special Session (UNGASS) reported that the age groups most affected are women ages 30 to 34 years with 4.1% prevalence and men ages 40 to 44 years with 4.4% prevalence; however, young women are becoming increasingly at risk (USAID, 2010). Significant increases in sexual violence against women and gang rape have made gender disparity a formidable barrier (Dévieux et al., 2009). Consequently, young women ages 15 to 24 are more than twice as likely to be HIV infected as young men with prevalence rates of 1.4% and 0.6% respectively. The majority of HIV cases reported in Haiti is due to heterosexual transmission, which, as in other Caribbean countries, is often linked to formal and informal sex work. According to surveys in 2001, 2% of women in Haiti were involved in sex work (USAID, 2010). Additional HIV risk factors in Haiti include cultural attitudes related to sexuality, rape, forced first intercourse, and sexual intercourse between partners of different ages (UNAIDS, 2010d).

According to the WHO, Haiti has one of the highest tuberculosis rates in the hemisphere with an estimated incidence rate of 250 new cases per 100,000 population in 2008. Approximately 23% of new TB cases in 2008 occurred among people who were HIV positive. This high percentage of co-infection poses a significant challenge to providing treatment and care for both diseases in the future (USAID, 2010). The 2007 UNAIDS/WHO estimates show that Haiti had 22% prevention of mother-to child transmission coverage and 41% antiretroviral therapy coverage. An estimated 13,000 people were on antiretroviral therapy in 2007, but it is estimated that 24,000 people were on treatment in 2009. The projected number of people living with HIV in need of antiretroviral therapy has now grown to an estimated 32,000 people (UNAIDS, 2010d).

Within Haiti, the burden of HIV prevalence varies significantly from region to region. Nippes has the highest prevalence rates at 3.8 percent among women and the southeast has one of the lowest prevalence rates at 1.7% among women (USAID, 2010). Additionally, a 2007 study reported by UNAIDS in 2010 found 12% of pregnant women using antenatal facilities in one of Haiti's cities have tested HIV-positive, compared with less than 1% in the west of the country. With an observed increasing trend of HIV among pregnant women, more children will be born to HIV-positive mothers (UNAIDS, 2010d).

Several behavioral studies performed in Haiti show a similarity between the HIV/AIDS situation and those of other countries in the Caribbean in terms of identifying knowledge and key risk behaviors. Although evidence shows an increasing knowledge about HIV/AIDS, the percentage of young women and men ages 15 to 24 who can both correctly identify ways of preventing HIV transmission and who reject major misconceptions regarding HIV transmission remains low at 35%. Additionally, knowledge of HIV does not necessarily correlate with the adoption of safer behavior or preventive practices (USAID, 2010). Despite a drop in the mean number of sexual partners and an increase in the use of condoms, protective behavior remains the exception rather than the norm (UNAIDS & WHO, 2008). For example, between 1994 and 2006, the percentages of young women and young men ages 15 to 24 who became sexually active before their 15<sup>th</sup> birthday increased from 9 to 15% among young women and from 17 to 43% among young men. During the same time period, the proportion of young men who had more than one partner in the past 12 months remained about the same, at approximately 30 percent (UNAIDS, 2008). Moreover, people at high risk of exposure to HIV do not consistently use condoms. In one survey, 34% of men and 21% of women ages 15 to 49 who had more than one sexual partner in the past 12 months reported using a condom during last sexual intercourse

(USAID, 2010). Among Haiti's most-at-risk populations, there have been some positive developments with 90% of female sex workers reporting using a condom with their most recent client and 73% of MSM reporting using a condom at their last intercourse. Furthermore, approximately 71% of sex workers and 48% of MSM appear to have had an HIV test and learned their results within the past 12 months (UNAIDS, 2008).

By the end of 2009, Haiti had begun to make strides towards alleviating the nation's HIV/AIDS epidemic; however, the January 2010 earthquake was not only incredibly damaging to the country but it also dealt a tremendous blow to the national HIV/AIDS response (Horstmann, 2010). Displaced populations are exposed to multiple vulnerabilities, including gender-based violence, sexual exploitation and transactional sex. Moreover, the Ministry of Public Health and Population building itself, the National AIDS Program building and many hospitals and health centers have either been partially or completely destroyed (UNAIDS, 2010d). The implications of increased risk of infection due to poorer living conditions and decreased access to HIV services and care including ART pose a serious threat to the progress Haiti has made in recent years to combat the HIV/AIDS crisis.

### ***Conclusion***

As a country that was never really given the chance to develop as an independent nation, Haiti has been plagued by political, social, and economic instability. Any opportunities to construct more prosperous lives were hindered by a long history of cruel, dishonest, and despotic leaders. Any growth or development in Haiti has been deterred by its government and lack of willingness or inability to govern or alleviate poverty. Due to a weak and practically nonexistent health care system, extreme poverty, and AIDS-related stigma and discrimination, the social and

economic effects of HIV/AIDS have been disproportionately high in Haiti in comparison with other countries in the Caribbean. Any efforts to alleviate the HIV/AIDS epidemic in Haiti have not been made by the Haitian authorities alone but rather largely by the many organizations that have provided HIV prevention, care, treatment, and support over the years. In the aftermath of the catastrophic earthquake, Haiti will not only need to rebuild its national HIV/AIDS response but it will also need the continued support of the international community and financial support of outside aid to rebuild its already weak health infrastructure and overall poor living conditions.



## Chapter VII: Discussion

The only way to do the human rights thing is to do the right thing medically.

Paul Farmer

### *Introduction*

While the Caribbean is thought of as paradise where clichéd images of white-sand beaches, blue seas, and tropical drinks inevitably come to mind, the real Caribbean is quite different. It may be one of the world's top tourist destinations, but high levels of poverty and unemployment along with broken and fragile social infrastructures have plagued this region for decades. What may also be uncommonly known about the Caribbean is that the region has been more heavily affected by HIV than any other region outside of sub-Saharan Africa and HIV remains the leading cause of death among people between the ages of 20 and 59. (UNAIDS, 2010a). The Caribbean may be a small region in terms of population, but HIV/AIDS is very much a threat to the public health. Therefore, it is important that the severity of the Caribbean's epidemic is not overlooked.

Since the first AIDS cases were reported in Haiti in 1981, the Caribbean has been confronted with a growing HIV/AIDS epidemic. The epidemiological profile of the HIV/AIDS epidemic is described as a mosaic, varying considerably between and within the countries in the region (USAID, 2011). Although there have been some successes in the fight against the HIV/AIDS epidemic in the Caribbean, there is still a long way to go before HIV/AIDS is under control. As compared to global world trends, the HIV/AIDS epidemic in the Caribbean is a relatively small epidemic; however, the Caribbean has the second highest adult HIV prevalence in the world. With a total population of 41,000,000, an estimated 240,000 people in the Caribbean are living with HIV (World Bank, 2010). In a region characterized by adverse circumstances, the burden of HIV varies considerably between and within countries in the

Caribbean. As evidenced in Cuba, the Dominican Republic, and Haiti, many gaps exist in access to prevention and care as well as efforts to address the HIV/AIDS epidemic which has been compounded by the social, cultural, economic, and political realities of the region.

### ***Conclusion***

Despite being a relatively poor country, Cuba has managed to have one of the lowest prevalence rates of HIV in the world whereas HIV/AIDS has heavily effected its neighboring countries the Dominican Republic and Haiti. The success of Cuba's response to the HIV/AIDS epidemic can be attributable to the fact that Cuba already had a strong health care system in place before the HIV/AIDS epidemic and that the Cuban government continues to make health a national priority. Health care was and is one of the Cuban revolution's greatest achievements and is "recognized as such not only by Cuban themselves but also by governments, international organizations, and poor citizens around the world who have directly benefited from Cuba's global health policies" (Sweig, 2009). Well before the first Cuban case was diagnosed, health officials launched a national AIDS education program and began to invest in not only HIV/AIDS awareness but prevention programs as well. Although Cuba had imposed a controversial mandatory quarantine of HIV patients this proved to be effective in containing the spread of HIV/AIDS along with mandatory testing. By the late 1990s, however, the Cuban government began to shift its focus on preventing HIV/AIDS through education. Educating the community at large about the experiences of PLHIV in addition to the modes of transmission and prevention of HIV infection became especially important as international tourism grew in Cuba and prostitution emerged in the 1990s (Smallman, 2007). The response of the Cuban health authorities was based on classic infectious disease control as evidenced by their quarantine policy but also included an epidemiological surveillance system, contact tracing, and screening

of at-risk groups in addition to research and development. By prioritizing health and using good public health methods to successfully contain and combat the spread of HIV/AIDS, Cuba has demonstrated how extraordinarily difficult it is, yet possible, to overcome economic underdevelopment and crushing economic sanctions and still provide health care for its population.

Unlike Cuba's effective mobilization of its state resources to address HIV/AIDS, the Dominican government has not placed as much emphasis on health care. Instead, many of its resources have gone towards the development of tourism instead of investments in health and education. Consequently, many Dominicans lack access to basic health care services. Negatively affected by its long history of weak government and political corruption, much of the Dominican response to HIV/AIDS has not come solely from the government but the support of NGOs and reliance on aid from international donors. The Dominican Republic has met the challenges of HIV/AIDS with some success despite being in the midst of political turmoil. Prevention efforts in the Dominican Republic have focused on condom promotion and STD management activities among CSWs and their clients which have contributed to a steady decline in HIV prevalence over the years. Program sustainability is a major concern, however, because ART is currently funded by international donors and not the national budget. The Dominican government has not made a commitment to provide additional funding for ART (USAID, 2010). The Dominican response to HIV/AIDS shows how important community mobilization can be to counter the epidemic, but shows the further need for dedicated governmental resources to strengthen state institutions and develop strategies for long-term financial sustainability.

As compared to Cuba and the Dominican Republic, Haiti also has a long history of political, social, and economic instability; however, any opportunities for growth and

development have been hampered by Haitian officials and agencies unwillingness and/or inability to deal with poverty in the country. Consequently, Haiti remains the most impoverished and unstable country in the western hemisphere. Since there has been a lack of dedication from Haitian officials to strengthen the state's institutions, Haiti's health care system is weak and practically nonexistent. Throughout Haiti's history, Haitian leaders have chosen to exploit the impoverished Haitian population rather than demonstrate political will to help them (Buss, 2008). Thus, the country's health care system has suffered and many Haitians are desperate for affordable health care. Similar to the Dominican Republic, any efforts to alleviate the HIV/AIDS epidemic have not been by the Haitian officials but have been facilitated by Partners in Health and other national and international NGOs and bilateral agencies. As a result, Haiti continues to have one of the highest prevalence rates in the Caribbean and has the largest epidemic in terms of PLHIV. Poverty and HIV-related stigma are the most significant barriers to HIV prevention in Haiti and arguably the most challenging to overcome. Tarnished by an early reputation as being the source of the HIV/AIDS epidemic, Haiti's experience reflects how complex international, social, and economic issues combined with extreme poverty have impeded its progress to combat the HIV/AIDS crisis.

### ***Recommendations***

As compared to the rest of the world, the origin of the HIV/AIDS epidemic in the Caribbean is distinct in terms of geography and population groups effected and involves different types and frequencies of risky behaviors and practices. As a whole, the exacerbation of the HIV/AIDS epidemic in the Caribbean region has been influenced by poverty, unemployment, stigma, and discrimination which have further complicated the region's overall response. Compounded with political chaos and instability, sex tourism, policies of the United States,

poverty, and developmental issues, the Caribbean faces many challenges to fight the spread of HIV in the region. Furthermore, stigmas associated with HIV/AIDS, a lack of sufficient medical recourses, and a lack of proper education have become additional barriers to providing care for PLHIV and preventing the spread of disease.

Although the Caribbean is a heterogeneous region, because of some important shared characteristics (low income island nations in the Caribbean with a history of political instability), Cuba's experience deserves further attention by countries like the Dominican Republic and Haiti for effective and inclusive approaches to HIV/AIDS. As evidenced in this research project, Cuba, the Dominican Republic, and Haiti, have had varied responses to the HIV/AIDS epidemic as have many other countries in the Caribbean. The national prioritization of health in Cuba in conjunction with the country's excellent use of public methods including awareness, education, and prevention programs have proven to be effective in containing the spread of HIV/AIDS. The HIV/AIDS epidemic has been more burdensome in the Dominican Republic and Haiti because health care has never been a priority of Dominican and Haitian officials. Although there has been some support by Dominican officials, Haiti lacks any full government support and dedication to containing the HIV/AIDS epidemic. By applying and adapting public health control measures and focusing on priorities for HIV prevention and education similar to what Cuba has done, the Dominican Republic and Haiti can begin to forge a path to meet their country's own needs and develop HIV/AIDS interventions that have sustainable effectiveness. This is going to be even more important as funding for HIV/AIDS continues to decline. To begin to do this, the Dominican Republic and Haiti should first estimate the costs of supporting existing HIV responses identify how these needs can be financed by national resources and adopt measures that will help contain future costs. Since resources are limited in the Dominican

Republic and even scarcer in Haiti, prevention funding needs to be allocated to the most effective interventions such as public awareness programs that aim to educate the public about HIV and its transmission, condom promotion and distribution activities, HIV testing and screening initiatives, and peer-led outreach programs.

As demonstrated in this project, the HIV/AIDS epidemic in the Caribbean is still largely effecting most-at-risk populations and now effects women and men equally (UNAIDSa, 2010). Given the specific needs of PLHIV and the unique stigma that surrounds the disease, it is imperative that all countries in the Caribbean continue to implement assertive prevention programs that specifically target their most vulnerable populations and address the individual and social challenges posed by HIV/AIDS. Since the HIV stigma is further heightened against homosexual men, MSM, and commercial sex work which are perceived as immoralities, MARPs in the Caribbean face even greater risk for discrimination and are more likely to hide their sexual orientations and practices and often refuse to disclose their HIV status. Since resources are already limited in Caribbean, prevention funding must be allocated to the most effective interventions and to the most effected target populations. Additionally, Caribbean leaders should make efforts to diminish stigma and discrimination not only associated with HIV but that is attached to sexual orientation and behavior.

In the context of HIV, poverty increases vulnerability as the result of a lack of resources or facilities to prevent or treat HIV as evident in the Caribbean. Poverty also increases vulnerability resulting from the need to generate some form of income and therefore, to engage in activities that increase an individual's risk of contracting the disease such as unprotected sex. Tourism in the Caribbean is perceived by many men and women to be one of their most lucrative

employment opportunities, and that such work often overlaps with commercial sex work. The Caribbean's popularity as a tourist destination coupled with increasing levels of sex tourism have already not only impacted prevalence rates among CSWs but also prevalence rates at the national levels. Therefore, a greater focus is needed to examine the negative consequences of tourism in the Caribbean and its pernicious effects on the region's most vulnerable populations. As the Caribbean's largest industry, tourism must be juxtaposed with the region's high HIV prevalence rates and leading cause of death among adults. Even though the Caribbean is promoted as paradise, the sex trade with tourists is very much a threat to any achievements the Caribbean has made in the fight against HIV/AIDS so far and is certainly a problem that deserves global attention.

## References

- Abbott, E. (1988). *Haiti: the Duvaliers and their legacy*. New York: McGraw-Hill.
- Anderson, T. (2009). HIV/AIDS in Cuba: lessons and challenges. *American Journal of Public Health*, 26(1).
- AIDSCAP/FHI. (1993). *Technical assessment of AIDS in the Dominican Republic: A Report to the U.S. Agency for International Development*. Santo Domingo: AIDSCAP/FHI.
- Asamoah-Adu, C. et al. (2001). HIV infection among sex workers in Accra: Need to target new recruits entering the trade. *Journal of Acquired Immune Deficiency Syndromes*, 28: 358-366.
- Balaguer, J. (1983). *La isla al revés: Haiti y el destino dominicano*. Buenos Aires: Ferrari Hermanos.
- Bell, M. (2007). *Toussaint L'Ouverture*. New York: Pantheon Books.
- BBC. (2011). I shot the cruelest dictator in the Americas. British Broadcasting Corporation: Retrieved from <http://www.bbc.co.uk/news/world>
- Boulos et al., (1990). HIV-I in Haitian women, 1982-1988. *Journal of Acquired Immune Deficiency Syndromes*, 3, 721-28.
- Buss, T. (2008). *Haiti in the balance: Why foreign aid has failed and what we can do about it*. Washington, D.C.: Brookings Institution Press.
- Galbán Garcia E., de Quesada Ramírez E, & Cádiz Lahens A. (1989). *Programa de entrenamiento sobre el SIDA 3: Epidemiología*. Havana: Editorial Ciencias Médicas.
- Cabezas, A. (2009). *Economies of Desire: Sex and Tourism in Cuba and the Dominican Republic*. Philadelphia: Temple University Press.
- CAREC. (2007a). *The Caribbean HIV/AIDS epidemic and the situation in member countries of*



- the Caribbean Epidemiology Centre*. Retrieved from <http://www.carec.org>
- CAREC. (2007b). *Behavioural surveillance surveys in six countries of the Organization of Eastern Caribbean States, 2005–2006*. Retrieved from <http://www.carec.org>
- Cayemittes et al. (2001). Enquete mortalite, morbidite, et utilization des services, Haiti 2000 [Demographic and Health Survey]. *Ministre de la Sante Publique et de la Population*. Calverton, MD: Institut Haitien de l'Enfance et ORC Macro.
- CDC (2006). Incidence and diagnoses of HIV infection – Puerto Rico. *Morbidity and Mortality Weekly Report*, 2009, 58:589–591.
- Centro de Estudios de Población y Desarrollo. (2010). Encuesta sobre indicadores de prevención de infección por el VIH/SIDA. Havana: National Statistics Bureau (CU).
- Chomsky, A. (2011). *A history of the Cuban Revolution*. West Sussex, UK: Wiley-Blackwell.
- CIA. (2011). World Factbook. Retrieved from: <https://www.cia.gov/library/publications/the-world-factbook/>
- Cohen, J. (2006). Making headway under hellacious circumstances. *Science*, 313(5786): 470-473.
- COIN. (1998). *Census of commercial sex establishments*. Santo Domingo: COIN.
- Corbet, B. (1994). The uses of Hati. *Review of the use of Haiti, by Dr. Paul Farmer*. Retrieved from <http://www.webster.edu/~corbetre/haiti/bookreviews/farmer.htm>
- COPRESIDA (2007). Endesa 2007. Dominican Republic. In UNAIDS, The status of HIV in the Caribbean. Retrieved from [www.unaidsscaribbean.org](http://www.unaidsscaribbean.org)
- Day, M. (2009). Drugs obscure the human rights issues for drug users. In Barrow, C, de Bruin, M, & Carr, R (Eds.), *Sexuality, Social Excursion & Human Rights* (pp. 23-37).
- Deschamps et al. (2000). HIV infection in Haiti: Natural history and disease progression. *AIDS*,

- 14:2515-2521. [PubMed: 16973846]
- Díaz et al. (2011). HIV detection in Cuba: Role and results of the National Laboratory Network. *MEDICC Review*, 13(2).
- Dévieux et al. (2009). Barriers to care among HIV+ Haitians: An examination of sociocultural factors. In: Pope, C., White, R; Malow, R., (Eds.). *HIV/AIDS: Global Frontiers in Prevention/Intervention*, pp. 238-245. New York, NY: Routledge
- ENDESA. (2008). *Republica Dominicana: encuesta demográfica y de salud 2007: resultados basicos*. Santo Domingo: Centro de Estudios Sociales y Demográficos and Macro Internacional Inc.
- Gage, A.J.& Hutchinson, P.L. (2006). Power, control, and intimate partner sexual violence in Haiti. *Archives of Sexual Behavior*, 35(1): 11-24. [PubMed: 16581754]
- Ghys, P.D. et al. (2001). Effect of interventions to control sexually transmitted disease on the incidence of HIV infection in CSWs. *AIDS* 15, 1421-1431.
- Gilbert, M., Rambaut, T., Wlasiuk, G. (2007). *The emergence of HIV/AIDS in the Americas and beyond*. Retrieved from [www.pnas.org](http://www.pnas.org)
- Gorry, C. (2011). Cuba's National HIV/AIDS Program. *MEDICC Review*, 13(2).
- Farmer, P. (1990). The exotic and the mundane: human immunodeficiency virus in Haiti. *Human Nature* 1, 4: 415-6.
- Farmer, P. (2010). *Partner to the poor: A Paul Farmer reader*. Berkley: University of California Press.
- Fadul, R.E., De Moya, A., García, Herold, E. (1992). Sexua interaction and HIV/STD risk between females, sex workers, and tourists. *International Conferences on AIDS* (abstract no. PoD 5618).

- Feinsilver, J. (1993). *Healing the masses: Cuban health politics at home and abroad*. Berkley: Univeristy of California Press.
- Figueroa J.P. (2008). The HIV epidemic in the Caribbean: meeting the challenges of achieving universal access to prevention, treatment and care. *West Indian Medical Journal*, 57: 195–203.
- Haperin, T. et al. (2009). Understanding the HIV epidemic in the Dominican Republic: A prevention success story in the Caribbean? *Journal of Acquired Immune Deficiency Syndrome*, 51: S52-S59.
- Hortsmann, A. (2010). Earthquake leaves Haiti HIV/AIDS efforts reeling, UN calls for international aid. *The AIDS Beacon*. Retrieved <http://www.aidsbeacon.com>
- Kerrigan D., Moreno, L., Rosario S., Sweat M. (2001). Adapting the Thai 100% condom programme: developing a culturally appropriate model for the Dominican Republic. *Cult Health Sex*, 3(2), 221-240.
- Koenig, R.E. et al. (1987). Prevalence of antibodies to the human immunodeficiency virus in Dominicans and Haitians in the Dominican Republic. *Journal of the American Medical Association*, 567, 5:631-34.
- Koenig, S et al. (2010). Success and challenge of HIV treatment programs in Haiti: aftermath of the earthquake. *HIV Therapy*, 4(2): 145-160.
- Malow, R., Rosenberg, R., Lichtenstein, B., & Dévieux, J. (2010). The impact of disaster on HIV in Haiti and priority areas related to the Haitian crisis. *Journal of Association of Nurses AIDS Care*, 21(3): 283-288.

Marquez, P & Montalvo, P (2011). Dominican Republic HIV/AIDS prevention and control Project. Retrieved from <http://go.worldbank.org>

Mehendale, S.M. et al. (1995). Incidence and predictors of human immunodeficiency virus type 1 seroconversion in patients attending sexually transmitted disease clinics in India. *Journal of Infectious Diseases* 172(6): 1486-1491.

Jamaica Ministry of Health (2007). Facts and figures: HIV/AIDS epidemic update January to December 2007. *National HIV/STI Prevention & Control Programme*.

Padilla et al. (2010). HIV/AIDS and tourism in the Caribbean: An ecological systems perspective. *American Journal of Public Health*. 100 (1): 770-77.

Padilla, M. (2007). *The Caribbean pleasure industry: Tourism, sexuality, and AIDS in the Dominican Republic*, Chicago: The University of Chicago Press.

Pape, J. (1999). AIDS in Haiti, 1980-1996. *The Caribbean AIDS Epidemic*, pp. 226-42. Kingston, Jamaica: The University of West Indies Press

PIH (2012). The HIV equity initiative. Retrieved from [www.pih.org](http://www.pih.org)

Pérez, J. et al. (2004). *Approaches to the management of HIV/AIDS in Cuba*. Geneva: World Health Organization.

Pérez, L. (2011). *Cuba: between reform and revolution*. (4<sup>th</sup> ed.) Oxford: Oxford University Press.

Pons, F. (2010). *The Dominican Republic: A Natural History*. (3<sup>rd</sup> ed.) Princeton: First Markus Wiener Publishers.

- PSI. (2011). Dominican Republic. Retrieved from <http://www.psi.org/dominican-republic>
- Quan, V. et al. (2000). HIV in Vietnam: the evolving epidemic and the prevention response, 1996 through 1999. *Journal of Acquired Immune Deficiency Syndrome*, 25(4): 360-369.
- Rodríguez, M. (2011). Atención integral a las personas con VIH/SIDA. Havana, Cuba.  
Retrieved from [www.giron.co.edu](http://www.giron.co.edu)
- Rotberg, R. (1988). Weariness Greets Latest Coup. *Latin American Markets*, August 29.
- Sabatier, R. (1988). Blaming others: prejudice, race, and worldwide AIDS. Washington, DC: Panos Institute.
- Schoepf, B. (1993). AIDS Action-Research with Women in Kinshasa, Zaire. *Social Science and Medicine*, 37, 11:1401-13.
- Spector, R. (1984). W. Cameron Forbes and the Hoover Commission to Haiti. Lanham: University Press of America.
- Smallman, S. (2007). The AIDS pandemic in Latin America. Chapel Hill: The University of North Carolina Press.
- Stromsesen, J., & Trincellito, J. (2003). Building the Haitian national police. *Research Paper 6*. Washington: Congressional Research Service, January 23.
- Sweig, J.E. (2009). *Cuba: what everyone needs to know*. Oxford: Oxford University Press.
- UNAIDS. (2002). Report on the global HIV/AIDS epidemic. Geneva, Switzerland. Retrieved from [www.unaids.org](http://www.unaids.org)

- UNAIDS. (2008). *Report on the global AIDS epidemic*. Retrieved from
- UNAIDS & WHO. (2008). AIDS epidemic update report. Retrieved [www.unaids.org](http://www.unaids.org)
- UNAIDS (2008). Keeping score II. A progress report towards universal access to HIV prevention, treatment, care, and support in the Caribbean. Retrieved from [www.unaids.org](http://www.unaids.org)
- UNAIDS. (2010a). The status of HIV in the Caribbean. Retrieved from [www.unaidscaribbean.org](http://www.unaidscaribbean.org)
- UNAIDS. (2010b). Report on the global AIDS epidemic. Retrieved from [www.unaids.org](http://www.unaids.org)
- UNAIDS. (2010c). Country Congress Report on Cuba. Retrieved from [www.unaids.org](http://www.unaids.org)
- UNAIDS (2010d). Helping Haiti rebuild its AIDS response. Retrieved from [www.unaids.org](http://www.unaids.org)
- UNAIDS. (2011). UNAIDS World Day Report. Retrieved from [www.unaids.org](http://www.unaids.org)
- UNDP (2005). *National human development report, the Dominican Republic*. Geneva, Switzerland: UNDP.
- USAID. (2010). Dominican Republic HIV/AIDS health profile. Retrieved from <http://www.usaid.gov>
- USAID. (2011). HIV/AIDS health profile Caribbean. Retrieved from [www.unaids.org](http://www.unaids.org)
- Vasques I. (1992). Doing what we can for Haiti. *Cato Policy Analysis*, 183. Retrieved from <http://www.cato.org/pubs/pas/pa-183.html>
- Whitman, D. (2005). *A Haitian Chronicle*. Victoria, B.C.: Trafford Press.

WHO (2003). *The HIV/AIDS epidemic in the Caribbean*. Macrohealth Newsletter. Retrieved from <http://www.who.int/macrohealth/infocentre/newsletter>

WHO (2011). Progress report 2011: Global HIV/AIDS response. Retrieved from [www.who.org](http://www.who.org)

The World Bank (2001). HIV/AIDS in the Caribbean: Issue and Options. *The International Bank for Reconstruction and Development*. Washington, D.C.

The World Bank (2010). World Bank-financed HIV projects in the Caribbean: Lessons for working with small states. *Latin America and Caribbean Region and Global HIV/AIDS Program*. Retrieved from <http://www-wds.worldbank.org>