

IDENTIFYING THE CAUSES OF THE RATE OF HIV/AIDS IN BOTSWANA:  
IMPLICATIONS FOR FOREIGN POLICY

by

GEORGIA MCPEAK

(Under the Direction of Abdulahi Osman)

ABSTRACT

Why has Botswana, arguably the best run country on the continent of Africa, with a stable, transparent, and legitimate government as well as a capable public health care system, nonetheless failed to stem the AIDS epidemic? This question, known as ‘the Botswana Paradox,’ is addressed in this paper in part because of the policy implications for the United States Agency for International Development. Over a five-year period (beginning in January 2004), USAID will spend approximately \$56 million dollars on HIV/AIDS prevention activities in Botswana under the President’s Emergency Plan for AIDS Relief (PEPFAR). This paper addresses how PEPFAR funding should be targeted via a *KAP* (**k**nowledge, **a**ttitude, **p**ractice) analysis. Data analysis show that the ‘KAP gap’ (the greatest area of weakness) lies not with knowledge or with attitude, but with individual sexual practices. For PEPFAR funding to have maximum impact, recommendations are given that address the KAP gap and focus on changing individual behavior.

INDEX WORDS: Botswana, HIV/AIDS, KAP (knowledge, attitude, practice), PEPFAR, United States Agency for International Development

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GEORGIA MCPEAK

B.A., University of Tennessee, Knoxville, 1986

M.A., University of Minnesota, St. Paul, 1993

M.A., University of Georgia, Athens, 2007

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GEORGIA MCPEAK

Major Professor:      Abdulahi Osman

Committee:            Loch Johnson  
                             Douglas Stinnett

Electronic Version Approved:

Maureen Grasso  
Dean of the Graduate School  
The University of Georgia  
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## DEDICATION

This paper is dedicated to the men and women in Africa that fight tirelessly for the prevention, treatment, and cure for HIV/AIDS.

## PREFACE

In August of 1995 I had the opportunity to travel in Botswana. Having spent about 5 years in West and Central Africa, it was nice to experience what many people call ‘Africa for beginners.’ I could see why – it was easy. There was solid infrastructure. The roads were good. Things *worked*. It was easy to travel from one town to another, communication was easy, and people were friendly and very helpful. I was very impressed.

In December 2006 I had the opportunity to return to Botswana. I was surprised at how much things had changed – for the better. There were many more buildings and signs of development. The roads, which I remember being in excellent condition in 1995, were being expanded to incorporate more lanes. The project seemed orderly and high-tech. I drove from Gaborone to Francistown, and then up to the Namibian border to the Chobe Game Reserve. The trip from Gaborone to Chobe is a little over 500 miles. Along the way at every major city, there were police stops. Several years ago the government of Botswana recognized that there was a problem with car accidents. In response, they initiated this system where drivers would be stopped and the car (and driver!) inspected to make sure it was road worthy. Cars that had any problems (brake lights, turn signals, headlights, for example) were given a citation, or simply not allowed to continue until whatever violation was corrected. When the car passed inspection, drivers were invited to go over to a tent set up on the side of the road and pick up literature on car safety. Coffee and water, as well as port-o-potties, were available. In addition to the literature on car safety, drivers were also given a package of 3 Durex condoms and information on safe sex practices and HIV/AIDS prevention.

As I drove from Gaborone to Chobe, I was very impressed with this car check system. It seemed to me to be an appropriate way for the government of Botswana (GOB) to address a serious and deadly problem – too many car accidents, too many deaths and injuries from car accidents. Initial information regarding this new project to reduce accidents show that it is working – fatal car accidents, according to the Ministry of Works and Transport, are down 13% from 2005 to 2006. Once again, Botswana lives up to its reputation as being a country with a capable governing system that identifies and corrects problems that arise.

Contrast this with the HIV/AIDS problem, and there is an interesting paradox. Botswana has one of the highest rates of HIV/AIDS infection in the world, estimated by UNAIDS to be approximately 25% of all adults (> 15 years of age). While the GOB can address car accidents and reduce the fatality rate by 13% within a 1-year time frame, they have been unable to deal with the AIDS crisis. It presents an interesting puzzle in many ways. Why has Botswana, arguably the best run country on the continent of Africa, with a transparent, stable, and legitimate government as well as a functioning and capable health-care system, nonetheless been unable to stem the tide of the HIV/AIDS epidemic? This paper attempts to answer that question and offer actionable and practical ideas for addressing HIV/AIDS in Botswana.

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## CHAPTER ONE

### INTRODUCTION

#### Purpose of the Study

The purpose of this study is to identify the primary causes of the high rate of HIV/AIDS in Botswana so that informed policy decisions can be made regarding United States Agency for International Development (USAID) funding. Botswana was selected for the study for several reasons. First and foremost, it has one of the highest rates of HIV/AIDS in the world. Next, it is the recipient of over 50 million US dollars via the President's Emergency Plan for AIDS Relief (PEPFAR) administered through USAID. And finally, Botswana presents an interesting case because of the paradox it presents: it is arguably the best run country on the continent, having a stable, transparent, legitimate government and a capable and functioning health care system but it is nonetheless unable to stem the tide of the HIV/AIDS epidemic. By solving the riddle of the 'Botswana Paradox' those working on the frontline of the HIV/AIDS epidemic will have accurate information that can guide programmatic decision making and assist in better targeted responses in the fight against the disease.

#### Thesis Design

Background information is essential in order to fully understand the epidemic and how it is affecting the country of Botswana. Chapter 2, therefore, gives a broad definition of what HIV/AIDS is and provides a short, general history of the epidemic. It continues with a more focused discussion of the AIDS epidemic in Africa, covering transmission, trends, and

consequences. Chapter 3 presents Botswana. In addition to a brief history of the country, which is important for understanding the country today, a history of the AIDS crisis in Botswana is also covered. Chapter 4 introduces the United States Agency for International Development (USAID) and the President's Emergency Plan for AIDS Relief (PEPFAR). An understanding of these agencies is necessary because of the role they play in implementing American foreign policy. This chapter also explains why it is important that the United States play a role at all in the global fight against HIV/AIDS.

Chapter 5 consists of a review of each of the most widely held theories on why Botswana has such a high rate of HIV. The theories have been examined via a KAP framework (knowledge, attitude, and practice), so that a 'KAP gap' can be identified. A *KAP gap* is defined as the weakest area where interventions should be focused. KAP studies measure the knowledge, attitude and practices of a particular community. The knowledge possessed by a community refers to their understanding of a given topic (in this case, HIV/AIDS transmission and prevention). Attitude refers to their feelings about the topic as well as any preconceived ideas they may have toward it. Practice refers to the ways in which they demonstrate their knowledge and attitude through their actions. Understanding the levels of knowledge, attitude and practice will enable a more focused approach to educating the community on HIV/AIDS transmission and prevention. The end results are recommendations for the most efficient use of USAID funds in Botswana, found in Chapter 6.

### Data Source

Primary data for this paper were taken from a much larger monitoring and evaluation study conducted by Population Services International (PSI). PSI is an international non-governmental organization that addresses the health problems of low-income and vulnerable

populations in developing countries.<sup>1</sup> In July 2005, PSI implemented a study in order to generate actionable evidence for the social marketing of subsidized condoms in Botswana. The study was presented in terms of the 'PSI Dashboard' which is a set of standardized tables for segmentation, monitoring and evaluation of populations. The purpose of the dashboard was to answer questions regarding sexual practices and condom use as well as answer service delivery questions regarding sales areas and quality and quantity of coverage for condom sales. Included in the dashboard are data pertaining to the knowledge, attitude and practice of Batswana<sup>2</sup> regarding the transmission and prevention of HIV/AIDS. That specific data (regarding only knowledge, attitude, and practice) has been extrapolated for this thesis. Thus, this thesis represents a small, independent and different study taken from a much more comprehensive evaluation of HIV/AIDS prevention activities in Botswana.

### Methodology

For the PSI Dashboard data, a structured interview questionnaire was used to obtain information on sexual behavior and condom use practices among randomly selected 1,687 unmarried young people aged 15-24 years.

Trained interviewers undertook the pilot study with 300 respondents in Gaborone, the capital city. Using the pilot results, PSI did reliability and validity analyses on the psychosocial constructs and their measurement scales in order to adapt the survey instrument to the local context and implement the survey nation-wide with an additional 1,387 respondents.

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<sup>1</sup> Information on Population Services International can be found at their web site, [www.psi.org](http://www.psi.org).

<sup>2</sup> Batswana are citizens of Botswana (singular, *Motswana*).

Informed consent was obtained for each interview. The questionnaire covered demographics, media exposure, and HIV-related behaviors (sexual practice, condom use, and HIV testing).

Data was analyzed using SPSS 12 for Windows statistical package. For the PSI Dashboard, both frequency distributions of individual variables and association of independent variables to socio-demographic factors were determined. For purposes of this thesis, however, only frequency distributions of individual variables directly related to the knowledge, attitude, and practice of HIV/AIDS transmission and prevention have been determined. Additional information on the methodology is found in Chapter 5.

### Theories to be Examined

The paper looks at each theory via a KAP design, testing whether the high prevalence of HIV is due to a lack of knowledge, attitude (meaning a tendency or orientation of the mind – in this case, personal disposition as to whether or not HIV can be avoided), or personal sexual behavior. The theories are:

#### Knowledge

1. The prevalence of HIV/AIDS is due to a lack of knowledge regarding transmission and prevention of the virus. Or, alternatively, widespread educational outreach is common and most Batswana understand how the HIV virus is transmitted.

#### Attitude

2. Batswana men and women believe that they have the ability (self-efficacy) to prevent HIV infection. Or, alternatively, they believe that infection is inevitable and there is nothing they can do to prevent it from happening.

#### Practice



3. Batswana men and women practice safe sex (they do not have unprotected sex with infected partners). Or, alternatively, exposure to the virus is the result of unsafe sexual practices (they do have unprotected sex with infected partners).

If the KAP gap lies with knowledge, then respondents in the survey will not be able to correctly identify modes of HIV transmission or how to prevent it. Data regarding attitude will indicate the level of self-efficacy of the Batswana and answer if they feel they can control whether or not they get infected. Self-efficacy is an individual's estimate or personal judgment of his or her own ability to succeed in reaching a specific goal (in this case, prevention of being infected with the HIV virus). If there is a low level of self-efficacy, then the KAP gap will lie with attitude. Data regarding abstinence, monogamy, and condom use will demonstrate if the KAP gap is with practice.

Data analysis is intended to provide accurate information on where appropriate interventions should be focused. Identifying the gap will indicate if interventions should focus on education (knowledge), increasing self-efficacy (attitude), or personal sexual behavior (practice). Correctly channeling efforts where they are most needed is not only cost effective but can save lives as well.

### Importance of the Study

This data in this thesis should be important for PEPFAR in Botswana for several reasons. First, the United States wants stability and predictability from other states. AIDS is a very destabilizing factor and if the current rate of infection is not brought under control, the entire southern African region can become destabilized, potentially toppling young, fragile democracies and creating an atmosphere ripe for extremist ideologies. Next, the amount pledged to Botswana is over 50 million dollars. For this to be money well spent, interventions need to

focus on specific, measurable, achievable, realistic, and time oriented interventions. Finally, and most importantly, *AIDS is a preventable disease*. We know exactly how the virus is transmitted. We also know how to prevent infection. The crisis is not beyond the realm of anyone's capability to solve, and yet rates continue to increase, children continue to lose their parents, communities continue to be torn apart, and people are still dying from AIDS. Indeed, the most shocking projections indicate *extinction* for some ethnic groups in southern Africa if present rates continue unabated. Given how much is known about the virus, and given that we also *know how to prevent it*, is there not a moral obligation to do everything possible to stop it from spreading?

## CHAPTER TWO

### HISTORY OF THE EPIDEMIC

#### Defining AIDS

According to the Center for Disease Control and Prevention, Acquired Immune Deficiency Syndrome (AIDS)

is a collection of symptoms and infections resulting from the specific damage to the immune system caused by the human immunodeficiency virus (HIV). The late stage of the condition leaves individuals prone to opportunistic infections and tumors. Although treatments for AIDS and HIV exist to slow the virus's progression, there is no known cure. HIV is transmitted through direct contact of mucous membrane or the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, pre-seminal fluid, and breast milk. This transmission can come in the form of anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, or breastfeeding, or other exposure to one of the above bodily fluids.<sup>3</sup>

#### Origin of the Virus

The origin of AIDS is and will probably remain unknown. However, it is thought to have originated in sub-Saharan Africa in non-human primates during the 20th century. In May 2006 Dr. Beatrice Hahn of the University of Alabama, Birmingham, announced that the HIV virus most likely originated in wild chimpanzees in the southeastern rain forests of Cameroon (modern East Province). Seven years of research and 1,300 chimpanzee genetic samples led Dr. Hahn to

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<sup>3</sup> Center for Disease Control and Prevention. HIV Resources 2007. <http://www.cdc.gov/hiv/resources/qa/qa2.htm>. Accessed 19 Jan. 2007.

identify chimpanzee communities near Cameroon's Sanaga River as the most likely originators.<sup>4</sup> According to Dr. Hahn, as well as conventional wisdom, transference from chimp to human most likely occurred when a human was bitten by a chimp or was cut while butchering one, and the human became infected. Dr. Hahn believes that calculating based on a fixed mutation rate, the jump from chimpanzee to human likely occurred during the French colonial period (1919–1960). Comparative primatologist Jim Moore suggests that this may have been the result of colonial practices of forced labor, which could have suppressed the immune system of the initial hunter enough to allow the virus to infect and take hold.<sup>5</sup> Likewise, forced immunizations and the old practice of using one needle on many patients may have sped the virus's spread through Cameroon and beyond.

One of the earliest documented HIV infection cases dates from 1959, and was discovered in the preserved blood sample of a man from Leopoldville, Belgian Congo which is now Kinshasa, Democratic Republic of the Congo.<sup>6</sup> How this person became infected is not known. As well, it is unknown whether this person ever developed full-blown AIDS and died of its complications. But tissue samples have confirmed that this man did, in fact, have the virus that causes AIDS. This fact confirms that HIV existed in very low levels in Africa prior to the mid-1970s, when infections first became documented in the United States as well as several European countries. There is little doubt now that the virus was present as early as the 1950s, but infection was isolated and sporadic diagnosis became more common in the 1980's. According to Ngandu Kabeya, the former Congolese Minister of Health:

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<sup>4</sup> Associated Press. USA Today. HIV's ancestry traced to wild chimps in Cameroon. 25 May 2006. Health and Behavior section, page 1 column 1.

<sup>5</sup> Richard Knox. Origin of AIDS Linked to Colonial Practices in Africa. <http://www.npr.org/templates/story>. Accessed 24 March 2006.

<sup>6</sup> Center for Disease Control and Prevention. HIV Resources 2007. <http://www.cdc.gov/hiv/resources/qa/qa3.htm>. Accessed 19 Jan. 2007.

You can look at the files and go back in time and discover several cases of patients who, in the past, showed grave signs of AIDS but were diagnosed with other diseases because we didn't know about AIDS yet. Today it is possible to state that these patients died of AIDS. In 1976, 1977, 1978, 1979 and 1980 cases were already known but they were isolated. Patients arrived either with persistent diarrhea, pulmonary problems, high fever, weight loss etc and all of these symptoms lead to death without us being able to arrive at a diagnosis.<sup>7</sup>

It is not known how many people developed AIDS in the 1970's, but it is agreed by AIDS experts that the dominant feature of this first period was *silence*. This was because HIV was unknown and transmission was not accompanied by signs or symptoms salient enough to be noticed. By 1980, HIV had spread to at least five continents (North America, South America, Europe, Africa and Australia). During the 1970's 'period of silence,' spread was unchecked by awareness or any preventive action and approximately 100,000-300,000 persons may have been infected.<sup>8</sup>

#### AIDS in Africa: The Sub-Saharan Situation

Sub-Saharan Africa has been far more severely affected by AIDS than any other world region. In May 2006, UNAIDS reported that in 2005, there were between 21.66 million and 27.40 million HIV-positive adults and children in Africa, including 2.7 million newly infected during the year.<sup>9</sup> Africa has just over 11% of the world's population but about 64% of the global HIV-positive population. The infection rate among adults averaged an estimated 6.1% in Africa in 2005, compared with about 1% worldwide.<sup>10</sup> About 2 million adults and children were

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<sup>7</sup> Philippe Denis and Charles Becker, editors. The HIV/AIDS Epidemic in Sub-Saharan Africa in a Historical Perspective. History Department, University of Lubumbashi. Online edition, October 2006. <http://www.refer.sn/rds/IMG/pdf/19NKUKUKONDE.pdf>. Accessed 20 March 2007.

<sup>8</sup> Jonathan Mann. 1989. AIDS: A worldwide pandemic. Current topics in AIDS, volume 2, edited by Gottlieb M.S., Jeffries D.J., Mildvan D., Pinching, A.J., Quinn T.C., John Wiley & Sons

<sup>9</sup> UNAIDS Epidemic Update. December 2006. Publication number CP140, pp 10-17.

<sup>10</sup> UNAIDS Epidemic Update. December 2006. Publication number CPI40, page 20.

estimated to have died of AIDS in 2005. Since the start of the AIDS epidemic in 1982, between 27.1 million and 27.7 million Africans have died of the disease. This includes about 2 million in 2005.<sup>11</sup> UNAIDS has projected that between 2000 and 2020, 55 million Africans will likely have lost their lives to AIDS, which causes more deaths than malaria in adults, and kills many times



more people than all of Africa's current armed conflicts combined.

Figure 2.1: *Sub-Saharan Africa refers to the countries south of the Sahara, pictured above in yellow.*

<sup>11</sup> These totals reflect rough estimates of total numbers of deaths and were compiled by aggregating the total numbers of deaths reported for all years since 1982, based on data reported in various published UNAIDS and World Health Organization (WHO) sources.

**Table 2.1. African Adult (age 15+) HIV Infection Rates (%), End of 2005**

<b>More than 10%</b>		<b>5% - 10%</b>		<b>&lt;0.1% - 5%</b>			
Swaziland	33.4	Gabon	7.9	Nigeria	3.9	Burkina Faso	2
<b>Botswana</b>	<b>24.1</b>	Cote d'Ivoire	7.1	Guinea-Bissau	3.8	Benin	1.8
Lesotho	23.2	Uganda	6.7	Angola	3.7	Mali	1.7
Zimbabwe	20.1	Tanzania	6.5	Chad	3.5	Sierra Leone	1.6
Namibia	19.6	Kenya	6.1	Burundi	3.3	Sudan	1.6
South Africa	18.8	Cameroon	5.4	DemRepCongo	3.2	Guinea	1.5
Zambia	17	Congo	5.3	Equat. Guinea	3.2	Niger	1.1
Mozambique	16.1			Togo	3.2	Senegal	0.9
Malawi	14.1			Djibouti	3.1	Somalia	0.9
CAR	10.7			Rwanda	3.1	Mauritania	0.7
				Eritrea	2.4	Mauritius	0.6
				Gambia	2.4	Madagascar	0.5
				Ghana	2.3	Comoros	<0.1

### Estimating Rates of Infection

This chart is from the UNAIDS 2006 *Report on the Global AIDS Epidemic*. Botswana's rate, darkened above, is 24.1% of the adult population. UNAIDS is a key source of national AIDS data in Africa. Its data are widely seen as accurately reflecting trends, though some researchers assert that improved data collection and statistical models are showing that it may have overestimated infection rates in some countries in the past. For example, earlier estimates of 35 to 38% infection rates for the adult population in Botswana have been determined to be inaccurate.

UNAIDS/WHO estimates are based on all available data, including surveys of pregnant women, population-based surveys, and other surveillance information. There have been steady improvements in the modeling methodology used by UNAIDS/WHO and partners, along with

better data from country surveillance. These have led to lower global HIV/AIDS estimates, not just for the current year but also for past years, despite the continued expansion of the global epidemic. Note that current estimates therefore cannot be compared directly with estimates from previous years, nor with those that may be published subsequently.

Improvements to the data collection process is a constant and ever changing activity undertaken not only by UNAIDS and the World Health Organization but by all organizations that work in HIV/AIDS prevention. These on-going efforts will ensure that the best possible estimates are available to assist governments, non-governmental organizations and others in gauging the status of the epidemic and monitoring the effectiveness of prevention and care efforts.

### *CHARACTERISTICS OF THE AFRICAN EPIDEMIC*

#### Transmission

In Africa HIV is spread primarily by heterosexual contact with an infected person. Secondary sources of transmission include sharing needles and/or syringes (primarily for drug injection) with someone who is infected, or, less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breast-feeding after birth. There are currently some experts that believe that the role of unsafe medical practices in Africa (reusing needles, improper screening of blood for transfusions, improper sanitation, etc.) in the spread of HIV may have been underestimated, and that could a primary source of transmission as well.<sup>12</sup>



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<sup>12</sup> Guardian Newspapers 2006. Medical Practices Blamed for Spread of HIV in Africa. Published 20 Feb. 2006.

## Women

According to UNAIDS, in 2005 there were about 13.2 million HIV-positive women in Africa. They comprised about 59% of infected adults in Africa and about 76% of HIV-positive females globally. Young women are notably at risk. In 2005, about 4.3% of African women aged 15 to 24 were HIV-positive, compared with 1.5% of young men. These figures had dropped from 6.9% and 2.2%, respectively, in 2004.<sup>13</sup>

## Prevalence Trends

UNAIDS has reported that Africa's adult HIV infection rate has stabilized in recent years.<sup>14</sup> It is believed to have peaked in the late 1990s, as both the total adult and infected populations have increased. Stabilization means that numbers dying approximate the numbers of newly infected. HIV has become endemic in many countries and at a minimum will affect several future generations. UNAIDS reports that there have been declines in Kenya, Zimbabwe, and urban areas in some countries, but prevalence is increasing in southern Africa (apart from Zimbabwe and Angola); remains unchanged or slightly declining in West and Central Africa, where overall rates are lower than in other regions of Africa; and is level or decreasing in several East and Horn of Africa countries, though there is much local variation.<sup>15</sup>

## Highest Rates

Southern Africa, where nine countries have adult infection rates above 10% (Table 2.1, page 9), is the most severely affected region. With about 1.65% of the world's population in 2005, based on U.S. Census estimates, these countries account for about 31.2% of infected people worldwide and 49% of those in Africa. However, populous Nigeria in West Africa, with

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<sup>13</sup> UNAIDS. HIV Data 2007. [http://www.unaids.org/en/HIV\\_data/default.asp](http://www.unaids.org/en/HIV_data/default.asp). Accessed 20 Jan 2007.

<sup>14</sup> UNAIDS. HIV Data 2007. [http://www.unaids.org/en/HIV\\_data/default.asp](http://www.unaids.org/en/HIV_data/default.asp). Accessed 20 Jan 2007.

an estimated 3.9% adult infection rate, has an estimated 2.9 million infected people,<sup>16</sup> the largest number in Africa apart from South Africa, where between 5.5 million and 6.1 million (UNAIDS average and South African government estimates) are infected — the largest such population in the world.

### Children

Africa's AIDS epidemic has a proportionally much greater effect on children in Africa than in other world regions. According to UNAIDS, over 600,000 African infants become infected yearly with HIV through mother-to-child transmission, either at birth or through breastfeeding, and most die before the age of two. Nonetheless, an estimated 2 million African children under age 15 were living with AIDS in late 2005. Nearly 90% of HIV-positive children worldwide live in Africa. Less than 10% of these African children receive basic support services. An estimated 12 million children less than 17 years of age, slightly less than 10% of all African children, have lost one or both parents to AIDS.<sup>17</sup>

### Orphans

By late 2005, according to UNAIDS estimates published in 2006, there were about 12 million AIDS orphans (children 17 and under who had lost one or both parents to HIV) in Africa, up from about 10.2 million in late 2003, when AIDS orphans comprised in the range of 28% of all orphans in the region. By 2010, their number is forecast to rise to 18.4 million, or 36.8% of all orphans.<sup>18</sup> Because of AIDS-related social stigma, HIV-positive orphans are at high risk for

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<sup>15</sup> Ibid.

<sup>16</sup> UNAIDS estimates for Nigeria vary widely, however, from 1.7 million to 4.2 million

<sup>17</sup> UNAIDS/UNICEF/U.S. Agency for International Development, *Children on the Brink*, July 2004.

<sup>18</sup> UNAIDS/UNICEF/U.S. Agency for International Development, *Children on the Brink*, July 2004. Estimates vary. Some earlier estimates had put the number as high as 12.3 million. In November 2003, UNICEF predicted that 20 million children would be orphaned by AIDS by 2010 and that in a dozen countries orphans from all causes would make up 15% to over 25% of children under 15; see *Africa's Orphaned Generations*.

malnourishment, abuse, indoctrination by radicals, and denial of education. UNICEF has recommended that the capacity of families and communities to protect and care for orphans be strengthened, that social and state protection services be provided for orphans and vulnerable children (OVCs), and that public education about HIV-affected children (including HIV-infected children and those who may suffer indirect effects of AIDS, e.g., those who come from families with HIV-positive members) be increased. In October 2005, Human Rights Watch alleged in a report that African governments have largely not addressed the myriad barriers to education faced by AIDS-affected OVCs.<sup>19</sup>

### *EXPLAINING THE AFRICAN EPIDEMIC*

#### Poverty

AIDS experts attribute Africa's AIDS epidemic to a variety of economic and social factors, but place primary blame on the region's poverty, which has deprived Africa of effective systems of health information, health education, and health care.<sup>20</sup> As a result, Africans suffer from high rates of untreated sexually-transmitted infections other than AIDS, increasing their susceptibility to HIV. African health systems often have limited capabilities for AIDS prevention work, and HIV counseling and testing are difficult for many Africans to obtain. Until very recently, AIDS treatment was generally available only to elites.

#### Migration

Poverty forces large numbers of African men to migrate long distances in search of work, and while away from home they may have multiple sex partners, increasing their risk of

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<sup>19</sup> Human Rights Watch. Report on HIV/AIDS and Human Rights, 2006. <http://www.hrw.org/doc/?t=hivaid&documentlimit=0,2>. Accessed 20 Jan 2007.

infection. Some of these partners may be women who engage in commercial or “transactional” sex because of poverty, which makes them highly vulnerable to infection. Migrant workers may carry the infection back to their wives when they return home. Long-distance truck and public transport drivers are also seen as key agents in the spread of HIV. Women and girls are disproportionately affected by AIDS in Africa. According to UNAIDS officials and publications, among other sources, contraction of HIV by girls from older men is a significant factor contributing to higher rates of infection among young women than in young men. While older men are more likely than young men to be HIV-positive, girls in impoverished contexts often view relationships with older men as vital opportunities for achieving financial, material, and social security.

### Women’s Rights

Many believe that female infection rates would be lower if women’s rights were more widely respected in Africa, and if women exercised more political and socioeconomic power. Human Rights Watch (HRW) and other organizations have reported that domestic violence targeting women in some African countries has made these women more vulnerable to HIV infection, in part by depriving them of the power to negotiate condom use.<sup>21</sup> For this reason, some policy advocates see a need for greater support for fidelity campaigns primarily aimed at African men. Women also lack or have weak property rights in many African countries, making their homes or property vulnerable to seizure by relatives when women suffer the loss of their spouses due to AIDS.

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<sup>20</sup> UNAIDS/World Health Organization. AIDS Epidemic Update. December 2006. [http://www.unaids.org/en/HIV\\_data/epi2006](http://www.unaids.org/en/HIV_data/epi2006). Accessed 20 Jan 2007.

<sup>21</sup> See, e.g., HRW, A Dose of Reality Women’s Rights in the Fight against HIV/AIDS, March 2005

## Social and Economic Consequences

AIDS is having severe negative social and economic consequences in Africa, and these effects are expected to continue for many years, as suggested by a January 2000 Central Intelligence Agency estimate on infectious disease threats. The report states that at least some of the hardest-hit countries, initially in Africa and later in other regions, will face a demographic catastrophe as HIV/AIDS and associated diseases reduce human life expectancy dramatically and kill up to a quarter of their populations over the period of this estimate.<sup>22</sup> This will further impoverish the poor, and often the middle class, and produce a huge and impoverished orphan cohort unable to cope and vulnerable to abuse, exploitation and radicalization.

The CIA estimate also predicted that AIDS would generate increased political instability and slow democratic development. The World Bank has reached similar conclusions with respect to Africa's economic future:

The illness and impending death of up to 25% of all adults in some countries will have an enormous impact on national productivity and earnings. Labor productivity is likely to drop, the benefits of education will be lost, and resources that would have been used for investments will be used for health care, orphan care, and funerals. Savings rates will decline, and the loss of human capital will affect production and the quality of life for years to come.<sup>23</sup>

In the most severely affected countries, sharp drops in life expectancy are occurring, reversing major gains achieved in recent decades. According to UNAIDS, average life expectancy in Africa is now 47 years due to AIDS, whereas it would have been 62 years in its absence. A March 2004 U.S. Census Bureau report predicted absolute population declines by

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<sup>22</sup> Central Intelligence Agency. 2000. The Global Infectious Disease Threat and Its Implications for the United States. <http://www.cia.gov/reports/archives/disease>. Accessed 18 March 2007.

<sup>23</sup> World Bank. Intensifying Action Against HIV/AIDS in Africa. September 1999. <http://siteresources.worldbank.org/INTHIVAIDS/Resources>. Accessed 20 March 2007.

2010 in all the southern African countries including South Africa, Botswana, Swaziland, Lesotho, Namibia, and Zambia due to AIDS.<sup>24</sup>

### Rural Livelihoods

Studies show that AIDS has devastating effects on rural families. The father is often the first to fall ill, and when this occurs, farm tools and animals may be sold to pay for his care, frequently leading to rapid impoverishment of often already poor families. Should the mother also become ill, children may be forced to shoulder responsibility for the full time care of their parents, farmsteads, and often of themselves, despite their frequently limited knowledge about how to carry out farm and domestic work. Many also become orphans. In 2001, the UNFAO reported that AIDS had killed about 7 million agricultural workers in 25 hard-hit countries in Africa and would likely cause 16 million more to die by 2020.<sup>25</sup> In 10 of the most affected countries, labor force losses of between 10% and 26% were forecast.<sup>26</sup> Some experts attribute serious food shortages in southern Africa in 2002 and 2003 to AIDS-related production losses.<sup>27</sup> In February 2003, in separate testimony before the Senate Foreign Relations Committee and the House International Relations Committee, WFP Executive Director James Morris said that AIDS was a central cause of the famine.<sup>28</sup> The following year Morris said that southern Africa was in a “death spiral” due to the effects of the AIDS pandemic, including the loss of human capacity and the devastation of rural areas, with resulting negative consequences for food security. There are less and less able bodied farmers to plant and harvest crops throughout the continent. The FAO supports many programs to alleviate the diverse threats that AIDS poses to agricultural

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<sup>24</sup> Nicolas Cook. AIDS in Africa. CRS Report for Congress. Library of Congress July 26, 2006, page 23.

<sup>25</sup> FAO. HIV/AIDS, Food Security and Rural Livelihoods. Published by FAO and WHO, 2001.

<sup>26</sup> Ibid.

<sup>27</sup> For example, see FAO, HIV/AIDS and the Food Crisis in Sub-Saharan Africa, ARC/04/INF/8, March 2004.

<sup>28</sup> Testimony before the Senate Foreign Relations Committee by James Morris, February 21 2003.

production and food security, but is currently over-extended due to current conflicts in the Democratic Republic of the Congo, the Sudan, Somalia, and droughts in West and central Africa.<sup>29</sup>

### Workforce Depletion

AIDS is blamed, in part, for increasing shortages of skilled workers and teachers in several countries and is claiming many African lives at middle and upper levels of public and private sector management. Although unemployment is generally high in Africa, trained personnel are not readily replaced. Dr. Peter Piot, UNAIDS Executive Director, told a June 2, 2005, special U.N. General Assembly meeting on AIDS that by 2006, 11 African countries will have lost 10% of their workforce to the disease.<sup>30</sup> A May 2002 World Bank study, *Education and HIV/AIDS: A Window of Hope*, reported that over 30% of teachers are HIV positive in parts of Malawi and Uganda, 20% in Zambia, and 12% in South Africa. Reports from diverse sources have since continued to mirror such findings.

### Security in Africa

AIDS and insecurity in Africa co-exist in a vicious cycle. Civil and international conflicts help spread HIV as populations are destabilized and armies move across new territories. At the same time, the epidemic contributes to national and international insecurity through high levels of HIV infection among military and peacekeeping personnel. Some estimates have the army of the Democratic Republic of the Congo with an infection rate of over 40%.<sup>31</sup>

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<sup>29</sup> FAO. HIV/AIDS Security Report, 2004. <http://www.fao.org/hivaids>. Accessed 18 March 2007.

<sup>30</sup>UNAIDS. HIV Data 2005. [http://data.unaids.org/Media/Speeches02/SP\\_ICAAP](http://data.unaids.org/Media/Speeches02/SP_ICAAP). Accessed 20 March 2007.

<sup>31</sup> Integrated Regional Information Network. Plus News. Army Needs to Tackle HIV and the Attitudes that Spread it. <http://www.plusnews.org/InDepthMain.aspx?InDepthId>. Accessed 1 April 2007.



The relationship between HIV/AIDS and political instability is indirect but real. In regions where HIV prevalence rates are high, the epidemic destroys the very fabric of what constitutes a state: individuals, families, communities and political institutions. AIDS affects and eventually breaks down community structures. Public administration, governance and social services become unsustainable in the process, and both coping capacity and policing capacity are reduced. As a result, communal conflict is likely to increase, which is particularly true for areas with a history of violence and armed conflict.

HIV/AIDS also has a direct impact on military capacity. Among male population groups, military and police report the highest risk behavior and number of partners.<sup>32</sup> Sexually transmitted infection rates among military personnel are two to five times greater than those in civilian populations in peacetime.<sup>33</sup> These figures increase dramatically during conflict. In some countries with adult HIV prevalence rates of 20%, as many as 50% of military personnel are estimated by UNAIDS to be HIV positive.<sup>34</sup>

The potential loss of experience, skills, and training capacity within the uniformed services can seriously affect military readiness. Peacekeeping is also at risk, because African soldiers are expected to play an important peacekeeping role in Africa in the years ahead. The infection rate in South Africa has been estimated at 23%, with higher rates reported for units based in heavily infected KwaZulu-Natal province.<sup>35</sup>

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<sup>32</sup>UNAIDS. HIV Data. 2006. [http://www.unaids.org/en/Issues/Impact\\_HIV/HIV\\_and\\_security.asp](http://www.unaids.org/en/Issues/Impact_HIV/HIV_and_security.asp). Accessed 18 March 2007

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

<sup>35</sup> Laurie Goering. "South Africa's Military Forges HIV Treatment," *Chicago Tribune*, March 7, 2006, found at <http://www.aegis.com/news/ct/2006/CT060302.html>, Accessed 12 February 2007.

## Security Implications for the United States

At present, the implications of HIV/AIDS for U.S. and global security are most profound in sub-Saharan Africa. In the landmark 2002 U.S. National Security Strategy the administration made the assertion that, for the first time in history, weak states pose a greater threat to the United States than strong states.<sup>36</sup> The disease is eroding state capacity in sub-Saharan Africa, an increasingly important front in the war on terror and an increasingly important source of resources and minerals. Note, for example, that the United States is expected to import as much as 25 percent of its oil from this region within the next decade.<sup>37</sup> As well, the U.N. World Food Program reports that AIDS has depleted the rural work force in southern Africa so thoroughly that it has seriously eroded the population's capacity to deal with cyclical droughts and food shortages.<sup>38</sup> The growing number of orphans increases the prospect of child soldiers being recruited for rebel armies or militias; child soldiers have already been heavily recruited into nearly all the conflicts on the continent.<sup>39</sup> Infection rates among African military personnel range as high as 50 percent with serious implications for Africa's ability to keep the peace and maintain law and order.<sup>40</sup> With reduced ability to deal with either economic development or security, Africa will become increasingly susceptible to conflict and increasingly attractive as a haven for terrorists and transnational criminal elements hostile to the United States.<sup>41</sup>

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<sup>36</sup> Colin Powell, "[A Strategy of Partnerships](#)," *Foreign Affairs* 83 (Jan.-Feb. 2004): 22-34.

<sup>37</sup> James Dao, "[In Quietly Courting Africa, U.S. Likes the Dowry: Oil](#)," *New York Times*, Sept. 19, 2002

<sup>38</sup> World Food Program Global Report, 2006.

<sup>39</sup> Relief Web Report: The Use of Children as Soldiers in Africa: A country analysis of child recruitment and participation in armed conflict, 2006.

<sup>40</sup> Interview with Alex de Waal, Justice Africa, Dec. 2003.

<sup>41</sup> The International Crisis Group, [HIV/AIDS as a Security Issue](#) (Washington, D.C./Brussels, June 19, 2001); Princeton N. Lyman and J. Stephen Morrison, "[The Terrorist Threat in Africa](#)," *Foreign Affairs* 83 (Jan.-Feb. 2004): 75-86

### Virus Mutation

There is an additional threat to the United States. According to the CDC, as treatment programs are introduced in Africa, concern over mutations of the virus will heighten, especially if treatment is not maintained. The spread of a more virulent virus to the United States—one immune to current treatment—would cause major health problems in the United States.<sup>42</sup> Thus, stemming the rate of infection and monitoring treatment programs in Africa are of vital importance to America's own public health.

### Overall Consequences

The HIV/AIDS epidemic is best described as being like a pebble dropped in a pool: HIV sends ripples to the edges of society, affecting first the family, then the community, then the nation as a whole.

By targeting predominantly young and middle-aged adults who are the mainstay of the economy and the principal support of their families, the epidemic destroys the very fabric of societies. Particularly in places where HIV prevalence is high, it hamstring economic growth and makes the provision of social services more difficult. And in a vicious twist, by exacerbating poverty it makes populations more vulnerable to the spread of HIV.

The impact of AIDS may be felt as an immediate shock, as when a family loses a breadwinner, or an organization a key worker. But at the wider community or national level the impact is felt as the gradual accumulation of losses, and diminution of resources and options for change. The seriousness of the impact depends not only on the numbers infected and directly affected by HIV, but also on the resources available to cope with the situation, whether at family, community or national level.

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<sup>42</sup> CDC. HIV Resources 2007. <http://www.cdc.gov/hiv/resources/qa/qa3.htm>. Accessed 19 Jan. 2007.

It is of paramount importance, then, that this global catastrophe be given the urgent priority it deserves. HIV/AIDS is not only an unprecedented humanitarian catastrophe but a political and security threat to both United States and global interests. American moral and strategic interests demand engagement at the highest level and with the urgency and scale of a high-priority foreign policy issue.

## CHAPTER THREE UNDERSTANDING BOTSWANA

### Geography and Demographic Data



Figure 3.1, Map of Botswana

Botswana is located in southern Africa, neighbored by South Africa to the east and south, Namibia to the west, Zimbabwe to the east, and Zambia and Angola to the north. It has a land mass of slightly over 600,000 square kilometers, roughly equaling the state of Texas. The land is 99% desert and suffers from periodic droughts. The population of roughly 1.5 million people is mostly centered in the central part of the country, near the

capital Gaborone. Botswana has a negative population growth rate, largely as a result of the high HIV/AIDS rate. Botswana is dominated by the Tswana ethnic group (79% of the population), and along with English, Setswana is the official language. The literacy rate is 78%. Botswana has universal suffrage and is governed under a parliamentary democracy system. It remains one of the most stable and least corrupt countries on the continent of Africa.<sup>43</sup>

### History

As mentioned previously, Botswana is arguably the best run country on the continent of Africa. How did it get to be this way? Is there anything unique about the history that provided a

<sup>43</sup> CIA World Fact Book. <http://www.cia.gov/cia/publications/factbook/geos/bc.html>. Accessed 1 Feb 2007.

foundation for its current success? Understanding the history of the country can help to explain the current situation.<sup>44</sup>

Prior to European contact, the people of Botswana (the *Batswana*, or *Tswana*) lived as herders and farmers under tribal rule. In the late 19<sup>th</sup> century, hostilities broke out between the Batswana and Boer settlers from the Transvaal province of South Africa. The Boer were moving northward in an effort to secure a trading route linking South Africa to Namibia. After numerous skirmishes that escalated in hostility, the Batswana leader, Khama III, asked for and received protection from the Boer by the British government in 1885. From that point, the country was referred to as the “Bechuanaland Protectorate.” This is very significant in the history of Botswana because it was not colonized in the traditional sense of colonization. A protectorate was based on the agreement of its indigenous people rather than colonial rule being arbitrarily imposed.<sup>45</sup>

In the late 1880’s, the area was somewhat uninteresting to colonizers because it was sparsely populated and predominantly desert land. At the time there were no known natural resources, and original requests for protection were actually *turned down* by the United Kingdom. The Boer encroached on the land solely to secure trading routes. In “the scramble for Africa”, Botswana was not particularly valued. Nonetheless, when the British developed schemes to expand their sphere of influence into central Africa, northern Batswana chiefdoms were a natural corridor and their annexation became inevitable.<sup>46</sup> Up to that point, British

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<sup>44</sup> Botswana history is as rich as it is profound. This perfunctory sketch of its history is in no way meant to be all encompassing; it is simply a very rough outline in order to provide a simple foundation for understanding the development of the country. I strongly encourage anyone interested in the history of this great country to begin with Neil Parson’s book entitled *Seretse Khama, 1921-1980* (Macmillan Boleswa Publishers, 1995).

<sup>45</sup> Basutoland (now Lesotho) and Swaziland were the two other British protectorates in Southern Africa. Like Botswana, Lesotho asked for British protection from the Boer. Swaziland became a protectorate after the South African War of 1899-1902.

<sup>46</sup> Louis A. Picard, editor. *Politics and Rural Development in Southern Africa: the Evolution of Modern Botswana*, Rex Collins Publishers, London, 1985, page 10.

missionaries had established good relationships with many of the Batswana chiefs, making it at least understandable that the Batswana would look to the British for protection from the Boer, who were seen as aggressors.

As described by Neil Parsons in his book *A New History of Southern Africa*, when the Union of South Africa was formed in 1910 out of the main British colonies in the region, the Bechuanaland Protectorate, Basutoland (now Lesotho), and Swaziland (the "High Commission Territories") were not included, but provision was made for their later incorporation.<sup>47</sup> However, a vague undertaking was given to consult their inhabitants, and although successive South African governments sought to have the territories transferred, Britain kept delaying, and it never occurred. The election of the National Party government in 1948 which instituted apartheid and South Africa's withdrawal from the Commonwealth in 1961 ended any prospect of incorporation of the territories into South Africa.<sup>48</sup>

Post World War II, a mixture of economic necessity, African nationalism, shifts in national ideology, and changes in the international balance of power led to decolonization across Africa. In June 1964, Britain accepted proposals for democratic self-government in Botswana. The seat of government was moved from Mafikeng in South Africa, to newly established Gaborone in 1965. The 1965 constitution led to the first general elections and to independence on September 30, 1966. Seretse Khama, a leader in the independence movement and the legitimate claimant to the Ngwato chiefship, was elected as the first president, re-elected twice, and died in office in 1980. Since independence and to date, Botswana has had elections every five years, on schedule, all deemed free and fair.

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<sup>47</sup> Neil Parsons. *A New History of Southern Africa*. Macmillan, 1993, pp.38-47.

<sup>48</sup> *Ibid*, page 47.

In sum, significant factors in Botswana's history include the fact that it has always been sparsely populated by herders, predominantly from a homogeneous ethnic group. These herders have historically been peaceful. As well, becoming a protectorate of the United Kingdom was achieved through negotiations with the tribal leaders as opposed to unilateral imposition. Independence was granted peacefully. The country was, and remains, stable. The foundation upon which it was built was solid, and this foundation has remained sturdy for over 40 years. The Batswana are deservedly proud of this heritage, and the national psyche is one of honor and decency. A corrupt government would be unacceptable to the Batswana people because they have never had one. According to Transparency International, Botswana's Corruption Perception Index score is 5.6, (out of 10, with 10 being no corruption and 1 being most corrupt), it is ranked 37<sup>th</sup> of 163 countries surveyed, and is the least corrupt country on the continent of Africa.<sup>49</sup>

The interesting history of the country is yet another reason for the paradox today – why has such a successful country, especially considering the struggles of the rest of the continent, been unable to cope effectively with stemming the HIV epidemic? Considering the success it has had with democracy, development of infrastructure, education, and a national health care system that functions, by any standards, extremely well, it still has one of the highest HIV rates in the entire world. What is Botswana missing?

### *HISTORY OF AIDS IN BOTSWANA*

#### Early Stages

Like many nations, Botswana's first AIDS case was officially reported in 1985. At that time AIDS was seen as a disease that affected male homosexuals in the West and people from

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<sup>49</sup> Transparency International Press Release, November 6, 2006.



other African countries, mostly in the central part of the continent around the Great Lakes region. Unlike other African countries, however, Botswana never denied that the disease existed and even in the early stages of the epidemic took action that was considered appropriate for the mid-1980's.

Botswana's response to the HIV and AIDS epidemic can be divided into three stages. The early stage (1987-89) focused mainly on the screening of blood to eliminate the risk of HIV transmission through blood transfusion. The second stage (1989-97) saw the introduction of information, education and communication programs, but the response was still quite narrowly focused. During this stage, in 1993, the Government adopted the Botswana National Policy on AIDS.<sup>50</sup>

During the third stage (1997 onwards), the response to HIV/AIDS was expanded in many different directions to include education, prevention and comprehensive care including the provision of antiretroviral treatment. Since 1997 the national policy aimed to involve many stakeholders who had previously been excluded, with the overall goal of not only reducing HIV infection and transmission rates, but also reducing the impact of HIV and AIDS at all levels of society.<sup>51</sup>

The Botswana National AIDS Coordinating Agency (NACA) was formed in 1999 and given responsibility for mobilizing and coordinating a multi-sectoral national response to HIV and AIDS. NACA works under the National AIDS Council, which is chaired by the President and has representatives from 17 sectors including civil society, the public sector and the private sector.<sup>52</sup>

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<sup>50</sup> Botswana National Policy on HIV/AIDS. Presidential Directive CAB: 35/93, 17 November 1993.

<sup>51</sup> UNDP. Country Reports 2000. Botswana Human Development Report 2000. pp.41-42.

<sup>52</sup> NACA 2007. <http://www.naca.gov.bw/about.htm>. Accessed 18 March 2007.

Early in 2001 the Government decided to initiate a rapid assessment of the feasibility of providing antiretroviral drugs through the public sector. The treatment program began at a single site in January 2002, and after a slow start expanded rapidly during 2004, so that around half of those in need were receiving medication by the end of the year.<sup>53</sup> In 2003 the Botswana National AIDS Coordinating Agency completed a National Strategic Framework which will guide its response to HIV and AIDS until 2009.

### Present Day Situation

In 2005 there were an estimated 270,000 people living with HIV in Botswana. This, in a country with a total population below two million, gives Botswana an adult HIV prevalence rate of 24.1%, the second highest in the world after Swaziland (see Table 1, page 9).

Life expectancy at birth fell from 65 years in 1990-1995 to less than 40 years in 2000-2005, a figure about 28 years lower than it would have been without AIDS.<sup>54</sup> According to the same UNAIDS report, an estimated 120,000 children have lost at least one parent to the epidemic. In an address to the UN assembly in June 2001, President Festus Mogae summed up the situation by saying “We are threatened with nothing less than extinction. People are dying in chillingly high numbers. It is a crisis of the first magnitude.”<sup>55</sup>

Botswana was the first African country to aim to provide anti-HIV drugs to all its needy citizens. Distribution of anti-retroviral drugs began in 2002, at first largely funded by the Government of Botswana. Because the country is considered to be so stable, it is widely believed that if any country in Africa is going to succeed in implementing such a comprehensive HIV/AIDS care and treatment program, it would have to be Botswana. According to the

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<sup>53</sup> UNAIDS/WHO. HIV Data. 3 by 5 Progress Report. December 2004.

<sup>54</sup> UNAIDS/WHO. Report on the Global AIDS Epidemic, January 2007. page 17

<sup>55</sup> Festus Mogae, President of Botswana, interview with reporters, Los Angeles Times, June 27, 2001.

Botswana National HIV/AIDS Strategic Framework for 2003-2009, Botswana must be seen as a leader in efforts to combat the epidemic because what is done in Botswana is intended to serve as the foundation of a renewed and aggressive response to the epidemic in the sub-region, the continent, and beyond.

### Current Initiatives

Among the most high profile anti-AIDS initiatives in Botswana are those supported by the African Comprehensive HIV/AIDS Partnerships (ACHAP) and the BOTUSA project.

ACHAP is a collaboration between the Government of Botswana, the Bill & Melinda Gates Foundation, the Clinton Foundation, and the Merck Company Foundation. ACHAP was established in July 2000 and is dedicated to supporting Botswana's HIV/AIDS response through the end of 2009. The Bill and Melinda Gates Foundation and the Merck Company Foundation have each committed \$50 million towards the project, and Merck is also donating two antiretroviral drugs. As of June 2005, ACHAP's total program spending was just over \$41 million.<sup>56</sup>

In 1995 the United States Centers for Disease Control and Prevention and the Government of Botswana began a collaboration called BOTUSA (Botswana and the United States of America), to work on public health research and social marketing programs to combat tuberculosis as well as HIV/AIDS. BOTUSA has grown substantially since 2000, more than doubling in size, and is now part of the President's Emergency Plan for AIDS Relief (PEPFAR).<sup>57</sup>

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<sup>56</sup> ACHAP. Partnerships for an AIDS Free Generation. 2007. <http://www.achap.org/index.html>. Accessed 10 April 2007.

<sup>57</sup> United Nations. Integrated Regional Information Networks. "BOTSWANA: US \$ 35 million boost for anti-AIDS efforts." 9 March 2005. <http://www.irinnews.org/IRIN-Africa.aspx>. Accessed 10 march 2007.

With help from these and other partners, including the Global Fund, the Harvard School of Public Health and the Bristol-Myers Squibb Foundation, the government of Botswana is mounting one of Africa's most comprehensive programs of HIV/AIDS prevention, treatment and care. This program is supported by the efforts of numerous local faith-based and local community-based organizations. As President Mogae said of these organizations, “There is no option for them but success.”<sup>58</sup>

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<sup>58</sup> Festus Mogae, President of Botswana, interview with reporters, Los Angeles Times, June 27, 2001.

## CHAPTER FOUR

### FOREIGN AID

#### The United States Agency for International Development

The United States Agency for International Development (USAID) is the United States government organization responsible for most non-military foreign aid. An independent federal agency, it receives overall foreign policy guidance from the United States Secretary of State and seeks to extend a helping hand to those people overseas struggling to make a better life, recover from a disaster or striving to live in a free and democratic country.<sup>59</sup>

USAID advances United States foreign policy objectives by supporting economic growth, trade, agriculture, health, democracy, conflict prevention and humanitarian assistance in Sub-Saharan Africa, Asia and the Near East, Latin America and the Caribbean, and Europe and Eurasia.

USAID's history goes back to the Marshall Plan reconstruction of Europe after World War Two and the Truman Administration's Point Four Program. In 1961, the Foreign Assistance Act was signed into law and USAID was created by executive order by President John F. Kennedy. Since that time, USAID has been the principal US agency to extend assistance to countries recovering from disaster, trying to escape poverty, and engaging in democratic reforms.

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<sup>59</sup> USAID. About, 2007. [http://www.usaid.gov/about\\_usaid/](http://www.usaid.gov/about_usaid/) Accessed 10 Jan 2007.

USAID's annual budget represents less than one-half of one percent of the total federal budget and is approximately \$36 billion.<sup>60</sup> USAID assistance in Botswana is administered via PEPFAR and is focused on the fight against HIV/AIDS and the continuation of excellent bilateral relations. The United States spends approximately \$20 million each year in Botswana, half of which is designated for HIV/AIDS prevention activities, the rest on military training, support for Peace Corps volunteers, promoting and sustaining economic development and natural resource management.<sup>61</sup>

### PEPFAR

In his State of the Union address on January 28, 2003, President Bush announced the President's Emergency Plan for AIDS Relief (PEPFAR/Emergency Plan). The Emergency Plan is the largest commitment ever by any nation for an international health initiative dedicated to a single disease -- a five-year, \$15 billion, multi-faceted approach to combating HIV/AIDS around the world. According to USAID, the United States now leads the world in its level of monetary support for the fight against HIV/AIDS.<sup>62</sup>

In May 2003, President Bush signed P.L. 108-25, the United States Leadership Against Global HIV/AIDS, Tuberculosis, and Malaria Act of 2003, which authorized PEPFAR.<sup>63</sup>

### PEPFAR Strategy

The PEPFAR authorization legislation from Congress authorized \$3 billion per year for fiscal years 2004–2008, including \$2 billion for bilateral assistance and \$1 billion for the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) that is contingent on matching

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<sup>60</sup> USAID. Congressional Budget Justifications, Foreign Operations, Fiscal Year 2008.

<sup>61</sup> PEPFAR. Country Data. <http://www.pepfar.gov/press/75873.htm>. Accessed 17 March 2007.

<sup>62</sup> USAID. HIV/AIDS Data. [http://www.usaid.gov/our\\_work/global.html](http://www.usaid.gov/our_work/global.html). Accessed 17 March 2007.

<sup>63</sup> PEPFAR. Legislative Authority. <http://www.pepfar.gov/pepfarfund/.html>. Accessed 19 Jan. 2007.

funds at a two-for-one ratio from other nations.<sup>64</sup> While not binding, provisions in the legislation recommended that funds be apportioned 55 percent for treatment; 20 percent for prevention (one-third of which was earmarked for "abstinence before marriage" programs); 15 percent for palliative care; and 10 percent for orphans and other vulnerable children.<sup>65</sup> Under the legislation, \$750 million—including \$300 million, which would be directed to an initiative aimed at reducing mother-to-child transmission—would be directed toward 14 countries: the Caribbean nations of Guyana and Haiti, and the African countries of Botswana, Cote d'Ivoire, Ethiopia, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia. In addition, the legislation created a new position at the State Department for a Global AIDS Coordinator, charged with carrying out the president's plan. The Global AIDS Coordinator's mandate is to lead the U.S. response to combat the worldwide pandemic; the Coordinator's purview is not restricted to the 14 PEPFAR countries.

PEPFAR supports the multi-sectoral national responses in host nations through the principles known as the "Three Ones": - one national plan, one national coordinating authority, and one national monitoring and evaluation system. Rather than mandating that all contributors do the same things in the same ways, the Three Ones facilitate complementary and efficient action in support of host nations.<sup>66</sup>

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<sup>64</sup> US Department of State, *The President's Emergency Plan for AIDS Relief: U.S. Five Year Global HIV/AIDS Strategy*, 2004. Introduction

<sup>65</sup> *Ibid*

## **Key Elements of PEPFAR**

With the appointment of a Global AIDS Coordinator and the legislation's enactment, the Coordinator's Office has spelled out key features of the administration's plan. As stated in the authorization legislation that Congress passed in May 2003, the key features include:

### **Goals**

The president has provided a clear five-year mandate to the Coordinator's Office. Over the next five years, it aims to prevent 7 million new infections, treat 2 million people, and care for 10 million infected people.<sup>67</sup>

### **Country-Specific Approach**

The Coordinator's Office intends to support each national program, as outlined by that country. United States ambassadors will be the point people in each nation and will report directly to the Coordinator. They will be charged with disbursing funds and overseeing each country's national effort. United States efforts, then, will cohere with each country's plans and support its specific needs.<sup>68</sup>

### **Emergency Response**

The initiative is an "Emergency" plan recognizing the urgency of the catastrophe and the need to plan and act accordingly.<sup>69</sup>

### **PEPFAR in Botswana**

Almost \$55 million in PEPFAR funding has been allocated over a five-year period for prevention activities in Botswana. To date, approximately \$15 million has been spent. Activities

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<sup>66</sup> PEPFAR. Three Ones Strategy. Support for Host Nations. <http://www.pepfar.gov/about/c19381.htm>. Accessed 15 April 2007.

<sup>67</sup> PEPFAR. Goals, 2007. <http://www.pepfar.gov/about/goals/87765.htm>. Accessed 17 April 2007.

<sup>68</sup> Ibid. Accessed 17 April 2007.

<sup>69</sup> Ibid. Accessed 17 April 2007.



funded by PEPFAR include prevention of mother-to-child transmission (PMTCT), abstinence and faithfulness programs, blood and injection safety, and other behavioral prevention initiatives.<sup>70</sup>

In 2007, prevention of transmission activities will continue to build upon work completed under PEPFAR. These PEPFAR activities have helped Botswana to establish prevention of transmission services in all public facilities through the Maternal Child Health/Family Planning system, which now serves over 95% of all pregnant women.<sup>71</sup> USAID will partner with the Botswana Ministry of Health to strengthen the scope, quality and sustainability of prevention services. PEPFAR will continue to support technical capacity-building in the Ministry of Health and in district health centers, support technical and managerial training for prevention of transmission staff, and build the capacity of faith-based, community-based, and non-governmental organizations to deliver high-quality, sustainable prevention services, including expansion of psychosocial support and peer counseling services to HIV-positive women and their families. PEPFAR funds will also support community mobilization and information and education (IEC) activities to increase awareness of and demand for prevention of transmission services.

### ABC Approach to HIV Prevention

The ABC approach seems to have first been adopted by the Botswana government in the late 1990s. Seen on billboards around the country it exalted the fact that: Avoiding AIDS is as easy as...

**A** bstain  
**B** e faithful  
**C** ondomise

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<sup>70</sup> PEPFAR. About, 2007. <http://www.pepfar.gov/about/77675.htm>. Accessed 17 April 2007.

<sup>71</sup> PEPFAR. Country Profile, Botswana. 2007. <http://www.pepfar.gov/press/81551.htm>. Accessed 17 April 2007.

PEPFAR follows an ABC strategy through population-specific interventions that emphasizes:

- **A**bstinence for youth, including the delay of sexual debut and abstinence until marriage
- **B**eing tested for HIV and being faithful in marriage and monogamous relationships
- **C**orrect and consistent use of condoms for those who practice high-risk behaviors.



**Fig. 4.1 Botswana Billboard Promoting ABCs**

Those who practice high-risk behaviors include prostitutes, sexually active discordant couples (in which one partner is known to have HIV), substance abusers, and others.<sup>72</sup>

The PEPFAR definition is controversial because it does not include the promotion of condoms to young people in general.

Whereas PEPFAR does say that its funds

may be used to support programs that deliver age-appropriate "ABC information" for young people, the condition accompanying this is that youth must also be informed about failure rates of condoms. Additionally, the programs may not appear to present abstinence and condom use as equally viable, alternative choices.

<sup>72</sup> The President's Emergency Plan for AIDS Relief: U.S. Five Year Global HIV/AIDS Strategy, Office of the US Global AIDS Coordinator, February 2004.

## CHAPTER FIVE

### KNOWLEDGE, ATTITUDE, PRACTICE

#### KAP Theories

This chapter reviews each of the most widely held theories on why Botswana has such a high rate of HIV. The theories have been examined via a KAP framework (knowledge, attitude, and practice), so that a ‘KAP gap’ can be identified. A *KAP gap* is defined as the weakest area where interventions should be focused. KAP studies measure the knowledge, attitude and practices of a particular community. The knowledge possessed by a community refers to their understanding of a given topic (in this case, HIV/AIDS transmission and prevention). Attitude refers to their feelings about the topic as well as any preconceived ideas they may have toward it. Practice refers to the ways in which they demonstrate their knowledge and attitude through their actions. Understanding the levels of knowledge, attitude and practice will enable a more focused approach to educating the community on HIV/AIDS transmission and prevention.

#### Data Collection and Methodology

As mentioned in the introduction, primary data for this paper were taken from a much larger monitoring and evaluation study conducted by Population Services International (PSI). In July 2005, PSI implemented a study in order to generate actionable evidence for the social marketing of subsidized condoms in Botswana. The study was presented in terms of the ‘PSI Dashboard’ which is a set of standardized tables for segmentation, monitoring and evaluation of populations. The purpose of the dashboard was to answer questions regarding sexual practices and condom use as well as answer service delivery questions regarding sales areas and quality

and quantity of coverage for condom sales. Included in the dashboard are data pertaining to the knowledge, attitude and practice of Botswana youth regarding the transmission and prevention of HIV/AIDS. That specific data (regarding only knowledge, attitude, and practice) has been extrapolated for this thesis. Thus, this thesis represents a small, independent and different study taken from a much more comprehensive evaluation of HIV/AIDS prevention activities and condom use in Botswana.

For the PSI Dashboard data, a structured interview questionnaire was used to obtain information on sexual behavior and condom use practices among randomly selected 1,687 unmarried young people aged 15-24 years.<sup>73</sup>

Trained interviewers undertook the pilot study with 300 respondents in Gaborone, the capital city. Using the pilot results, PSI did reliability and validity analyses on the psychosocial constructs and their measurement scales in order to adapt the survey instrument to the local context and implement the survey nation-wide with an additional 1,387 respondents.

Informed consent was obtained for each interview. The questionnaire covered demographics, media exposure, and HIV-related behaviors (sexual practice, condom use, and HIV testing).

Data was analyzed using SPSS 12 for Windows statistical package. For the PSI Dashboard, both frequency distributions of individual variables and association of independent

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<sup>73</sup>Multi-stage stratified random sampling procedure was applied on the sampling framework used by the 2001 Housing and Population Census in Botswana for the PSI survey. Enumeration areas were randomly selected from a list of all enumeration areas, using a sampling interval after a randomly generated number was used to select the starting enumeration area. An enumeration area contained 2 clusters and each cluster had 5 respondents. Accordingly 180 enumeration areas and 360 clusters were selected yielding a total sample of 1,800 un-married young people, of which 1,687 were successfully interviewed.

variables to socio-demographic factors were determined.<sup>74</sup> For purposes of this thesis, however, only frequency distributions of individual variables directly related to the knowledge, attitude, and practice of HIV/AIDS transmission and prevention have been determined.

### Socio-Demographic Characteristics of Respondents

In all, 1,687 respondents between the ages of 15 and 24 (49.9% males, 50.1% females) were interviewed. Geographically, 37.9% of them lived in rural areas, 26.4% lived in urban centers and the remaining 35.7% lived in urban villages ('urban' meaning population size of 5,000 and over 75% of its workforce engaged in non-agricultural activities). Only 54 (3.2%) of the respondents (out of 1,687) did not have any formal education. Of those with some form of formal education, 72 (7.7%) were in primary school, 790 (84.5%) were in secondary schools and 74 (7.9%) were post-secondary.

### Knowledge

What do the Batswana know about HIV/AIDS transmission and prevention? With one of the highest rates of HIV/AIDS in the entire world, it seems easy to place the blame on a lack of knowledge regarding what AIDS really and how the HIV virus is actually transmitted. If the Batswana do not understand how the virus is transmitted, clearly, efforts should focus on information, education, and communication activities that teach how to prevent transmission of the virus. Conversely, if the Batswana display a high level of knowledge of how the virus is transmitted and prevented, then, *at the very least*, current efforts at education should be continued.

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<sup>74</sup> Student *t*-test and chi-square statistics with 95% confidence intervals and odds ratios were used to determine bivariate associations. Correlation and logistic regressions were run to measure linear associations among psychosocial constructs and examine the independent influence of different factors on condom use.

The theory to be tested is:

The prevalence of HIV/AIDS is due to a lack of knowledge regarding transmission and prevention of the virus. Or, alternatively, widespread educational outreach is common and most Batswana know what AIDS is and understand how the HIV virus is transmitted.

The PSI survey asked a total of 350 questions, of which 16 dealt directly with knowledge of transmission and prevention of the virus. For purposes of this thesis, only frequency tables were run to determine the level of knowledge. This thesis is only asking what the level of knowledge is; therefore determining associations among psychosocial constructs and influences was not implemented. Eight questions were asked using a 5-point Likert scale, and 7 questions were asked using a 3 point index. The questions, and the frequency distribution, follow:

**Table 5.1: Frequency of Responses Regarding Knowledge of HIV/AIDS (5 pt. scale)**

Question		Strongly Agree		Agree Somewhat		Don't know		Disagree Somewhat		Strongly Disagree	
		n	%	n	%	n	%	n	%	n	%
1	I can protect myself from HIV by practicing safe sex	1465	86.8	115	6.8	25	1.5	8	0.5	30	1.8
2	HIV is found in semen of infected men	1517	89.9	93	5.5	4	0.2	7	0.4	22	1.3
3	Abstinence is the best means of avoiding HIV/AIDS	1499	88.9	90	5.3	16	0.9	11	0.7	39	2.3
4	Condoms offer excellent protection against HIV	1123	66.6	276	16.4	57	3.4	67	4.0	122	7.2
5	HIV is found in breast milk of an infected woman	1266	75.0	204	12.1	46	2.7	28	1.7	100	5.9
6	Condoms are not effective against preventing HIV/AIDS	201	11.9	100	5.9	61	3.6	188	11.1	1095	64.9
7	HIV is found in an infected person's blood	1353	80.2	212	12.6	25	1.5	17	1.0	38	2.3
8	HIV virus can pass through a condom	145	8.6	103	6.1	159	9.4	138	8.2	1104	65.4

**Table 5.2: Frequency of Responses Regarding Knowledge of HIV/AIDS (3 pt. scale)**

Question		Agree		Don't know		Disagree	
		n	%	n	%	n	%
9	Healthy looking persons can have HIV	1535	91	31	1.8	102	6.0
10	Symptoms of HIV infection are evident soon after contracting it	177	10.5	75	4.4	1415	83.9
11	I can tell by appearance if someone has HIV	497	29.5	57	3.4	1115	66.1
12	People can contract HIV/AIDS from toilets	169	10.0	97	5.7	1407	83.4
13	It's not possible to get HIV from sharing meals, utensils	1180	69.9	71	4.2	422	25.0
14	HIV can be spread from tongue kissing an infected person	751	44.5	216	12.8	706	41.8
15	It is safe to have unprotected sex with someone who has HIV but not AIDS	59	3.5	52	3.1	1562	92.6

### Knowledge Results

Knowledge of AIDS and the transmission of the HIV virus is very high. On all 15 questions, the overwhelming majority of respondents answered correctly or indicated a high level of agreement with the correct response. The HIV virus is transmitted via blood, semen, and breast milk of infected persons. For all three transmission types, over 75% of respondents strongly agreed with these statements, while less than 6% strongly disagreed, indicating that the respondents know the sources of transmission. Additionally, respondents agree that they can protect themselves from HIV/AIDS by practicing safe sex (86%), abstinence (89%) or by using condoms (66%). There appear to be little misconception regarding HIV/AIDS, as 91% strongly agreed that a healthy looking person can still be infected, that you cannot get the virus from sharing a toilet seat with an infected person (83%) or from sharing meals or utensils (70%). Finally, respondents also distinguish HIV from AIDS by disagreeing with the statement that it is OK to have unprotected sex with someone that has HIV but not AIDS (92%).

Education campaigns should be continued, indeed, ramped up where appropriate. But there is nothing to indicate that the problem with the rate of HIV in Botswana is with knowledge.

The Batswana are highly educated with an enviable literacy rate. According to the Botswana Ministry of Education, the literacy rate, defined as those aged 15 and older that can read and write, is 79.8%.<sup>75</sup> The Batswana have been exposed to public health campaigns for over 20 years. Available data indicates a high level of knowledge regarding the epidemic. There will always be room for improvement in this area, but is the weakest area in the KAP is clearly not with knowledge.

### Attitude

Attitude indicates the way a person feels about something. It is the tendency or orientation of the mind, indicative of a mood or condition, and is a very strong determining factor in personal behavior. If someone feels positively about an action, that person is more likely to engage in it. In this context, if the Batswana feel positively toward safe sex, fidelity, abstinence, and condom use, then they will be much more likely to engage in these behaviors. It is equally important for someone to believe that they have the ability, or self-efficacy, to engage in desired behaviors. Self-efficacy is an individual's estimate or personal judgment of his or her own ability to succeed in reaching a specific goal (in this case, prevention of being infected with the HIV virus). If the PSI survey indicates a low level of self-efficacy, then the KAP gap will lie with attitude. Information, education, and communication campaigns would therefore need to focus on changing the way the Batswana feel about low risk sexual behavior.

The theory to be tested is:

Batswana men and women believe that they have the ability (self-efficacy) to prevent HIV infection. Or, alternatively, they believe that infection is inevitable and there is nothing they can do to prevent it from happening.

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<sup>75</sup> Botswana Ministry of Education. Literacy rate, 2006. <http://www.moe.gov.bw/>. Accessed 15 April 2007.



The PSI survey included 11 questions (out of 350) concerning Batswana youth attitude toward the transmission and prevention of HIV/AIDS. The questions used a 5-point Likert scale for measure. The questions follow:

**Table 5.3: Frequency of Responses Regarding Attitude toward HIV/AIDS (5 pt. scale)**

Question		Strongly Agree		Agree Somewhat		Don't know		Disagree Somewhat		Strongly Disagree	
		n	%	n	%	n	%	n	%	n	%
1	Everyone has to die of something; HIV is just one thing I might die from	848	50.3	243	14.4	48	2.8	136	8.1	370	21.9
2	People like me can't really control whether we get AIDS	333	19.7	147	8.7	110	6.5	202	12.0	853	50.6
3	Getting HIV is a matter of bad luck	234	13.9	119	7.1	80	4.7	184	10.9	1022	60.6
4	The idea of catching AIDS does not bother me	79	4.7	32	1.9	21	1.2	119	7.1	1395	82.7
5	I am not the kind of person who is likely to get AIDS	241	14.3	180	10.7	125	7.4	221	13.1	875	51.9
6	I am afraid that I might contract AIDS	1036	61.4	285	16.9	24	1.4	71	4.2	225	13.3
7	I can control whether I get AIDS or not	1266	75.0	204	12.1	46	2.7	28	1.7	100	5.9
8	HIV is a punishment from God	374	22.2	105	6.2	229	13.6	104	6.2	832	49.3
9	HIV/AIDS is so prevalent you can't do much if it comes to you	548	32.5	191	11.3	43	2.5	146	8.7	716	42.4
10	I am very concerned about protecting myself from AIDS	1498	88.9	90	5.3	16	0.9	12	0.7	39	2.3
11	I could get HIV even if I do my best to prevent it	357	21.2	221	13.1	60	3.6	206	12.2	801	47.5

### Attitude Results

Data indicate that respondents have a somewhat positive attitude regarding their own ability to prevent infection with the HIV virus. Eighty-two percent dismiss the idea that they 'are not bothered' by getting the virus, and 89% are very concerned about protecting themselves from AIDS. However, almost one out of every four feel that HIV is a punishment from God (22%), while almost one out of every three feels that it is so prevalent that there is not much

anyone can do to prevent it (32%). Stigma toward infected persons would appear to be low, as few agreed that they are not the kind of person that who is likely to get AIDS (14% strong agree, 11% somewhat agree, 7% don't know). This indicates that just about everyone feels like they could become infected. Only 20% strongly agree that they can't control whether they get HIV or not; conversely, 76% strongly agree that they can control whether or not they become infected. Despite this, 61% strongly agree that they might contract the disease anyway.

The survey results indicate a healthy attitude toward one's ability to prevent infection of the disease, but it's as if it is on shifting sand. There is definitely room for concern because the data seems to suggest that people know how to get the virus, and they know how to prevent it, and they want to prevent it, yet they still feel like they could get it anyway. The PSI data confirms other research that shows hopelessness regarding infection. In "Assessing the Impact of HIV/AIDS on the University of Botswana," Dr. B. Chilisa also shows that knowledge of transmission is high, yet there is a sense of despair among the student. The following comment made by a male student is typical of student views on this issue:

*We are all going to die despite our knowledge. Sexual attitudes have not changed.*<sup>76</sup>

Note that half of all respondents in the PSI survey indicate that they strongly agree with the statement that HIV is just another thing to die from. As attitude strongly influences behavior, there is clearly work to be done to improve the attitude and self-efficacy so that the Batswana feel empowered to avoid infection. Botswana has not ignored the epidemic. Knowledge of the epidemic is extensive. A great deal of international donor funding for HIV/AIDS education and prevention programs has poured into Botswana over the years. Widespread AIDS awareness and

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<sup>76</sup> B. Chilisa (2001). "Assessing the impact of HIV/AIDS on the University of Botswana." Pula: Botswana Journal of African Studies 15(2): 196-203

a sense of the importance of the threat have nonetheless failed to convince people that they have the power to prevent infection. The attitude is passive. But it can be changed, as attitudes are not innate, they are learned. The data analysis here indicates that information, education and communication campaigns should focus on improving attitudes toward behaviors that are known to prevent transmission of the virus: abstinence, condom use, safe sex, partner reduction, and fidelity.

### Practice

What are the sexual practices of Botswana youth? According to the UNAIDS 2005 Country Data Report for Botswana the median age at sexual debut in Botswana is 17 and 85% of all persons 20 years and older are sexually active. According to the same report, 88% of males and 75% of females between the ages of 15 and 24 used a condom the last time they had sex with a casual partner.<sup>77</sup> Nonetheless, Botswana has an HIV rate of almost 25%. Data has already shown that there is a high level of knowledge regarding transmission and prevention of HIV/AIDS, and that there is a belief that one can prevent infection. Is there something standing in the way of knowledge being translated into behavior?

The theory to be tested for this section is that:

Botswana men and women practice safe sex (they do not have unprotected sex with infected partners). Or, alternatively, exposure to the virus is the result of unsafe sexual practices (they do have unprotected sex with infected partners).

The PSI survey asked a total of 15 questions (out of 350) directly pertaining to sexual practices, including condoms use and abstinence of Botswana youth.

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<sup>77</sup> UNAIDS. Country Data Report, Botswana.  
[http://www.unaids.org/en/Regions\\_Countries/Countries/botswana.asp](http://www.unaids.org/en/Regions_Countries/Countries/botswana.asp). Accessed 10 April 2007.

**Table 5.4: Frequency of Responses Regarding Sexual Practices (5 pt. scale)**

Question		Strongly Agree		Agree Somewhat		Don't know		Disagree Somewhat		Strongly Disagree	
		n	%	n	%	n	%	n	%	n	%
1	My friends use condoms	960	56.9	211	12.5	351	20.8	37	2.2	116	6.9
2	Abstinence is a very effective way to avoid contracting HIV	1474	87.4	104	6.2	16	0.9	19	1.1	31	1.8
3	Abstinence is commonly practiced because of HIV	490	29.0	231	13.7	83	4.9	175	10.4	697	41.3
4	I will use a condom the next time I have sex	1499	88.9	88	5.2	27	1.6	9	0.5	22	1.3
5	I intend to always use condoms with casual partners	1474	87.4	95	5.6	24	1.4	20	1.2	32	1.9
6	Abstinence is not possible for everyone	940	55.7	195	11.6	67	4.0	56	3.3	335	19.9
7	I enjoy sex with condoms	1184	70.2	198	11.7	205	12.2	25	1.5	40	2.4
8	Condoms are used by people that care about their health	1412	83.7	126	7.5	26	1.5	23	1.4	61	3.6
9	Condoms are for promiscuous people	72	4.3	49	2.9	55	3.3	118	7.0	1356	80.4
10	Condoms are pleasant to use	973	57.7	210	12.4	351	20.8	37	2.2	82	4.9
11	I know how to use a condom without breaking it	992	58.8	211	12.5	257	15.2	61	3.6	145	8.6
12	I would be shy to carry condoms with me	313	18.6	121	7.2	30	1.8	159	9.4	1045	61.9
13	If my partner refused to use a condom I could say no to sex	1223	72.5	202	12.0	55	3.3	44	2.6	143	8.5
14	I know how to use a condom properly	1115	66.1	235	13.9	120	7.1	45	2.7	152	9.0
15	My friends and I encourage each other to use condoms	1288	76.3	184	10.9	29	1.7	45	2.7	114	6.8

### Practice Results

Slightly more than half of respondents strongly agreed that their friends used condoms (56%), 89% strongly agreed that they will use a condom the next time they have sex, and 88% strongly agree that they will always intend to use a condom with a casual partner. Seventy percent strongly agree that they enjoy having sex with a condom, however, when the statement is worded slightly differently, only 58% strongly agree that condoms are pleasant to use. When asked if they knew how to use a condom without breaking it, 59% strongly agreed, however the

percentage moved up to 61% strongly agreed when asked if they know how to properly use a condom. All these statements indicate that Botswana does have a condom culture and that condom use is, at least for more than half of respondents, regular.

Attitude toward condom use is also considered good, as shown by 84% strongly agreeing that condoms are used by people that care about their health. A tiny minority strongly agreed that condoms were for promiscuous people (only 4%), and 76% of respondents strongly agreed that they encourage their friends to use condoms. Clearly, condoms are not taboo in Botswana.

Regarding abstinence, 87% strongly agree that it is a very effective way to avoid HIV, but only 29% strongly agree that HIV was a reason for practicing abstinence. Fifty-six percent strongly agree that abstinence is not possible for everyone. If a condom was not available, 73% strongly agree that they could say no to sex.

There is evidence to suggest that some respondents agree that there are emotional reactions to condoms that may translate into reduced condom usage. The reactions include embarrassment at being seen carrying/purchasing a condom, (note that almost 20% strongly agreed that they would be too shy to carry condoms). As well, about 27% didn't know or disagreed / strongly disagreed that condoms were pleasant to use, and 18% didn't know or disagreed / strongly disagreed that they know how to correctly use a condom.

Does this show that 'practice' is the weakest link in the KAP? The data is actually quite encouraging, especially with regard to intent to use condoms with casual partners and intent to use a condom the next time the respondent has sex (both responses were almost 90% strongly agree). But the fact remains that 25% of the adult population in Botswana is HIV positive. The questions regarding knowledge are straightforward – either respondents know how the virus is transmitted or they don't. The responses clearly show that they do. Respondents indicated that

they are concerned about getting infected, that they believe that they can prevent infection, but they also feel like they might get it anyway. There is work to be done in the area of attitude. But although it may contribute to the problem, a bad attitude does not transmit the virus that causes AIDS. Contact with infected blood, semen, or breast milk does, and it is entirely possible, easy, in fact, to protect oneself from this. The 55 million dollar PEPFAR question for Botswana is: what exactly stands in the way of knowledge being translated into behavior?

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

This paper tried to help solve the 'Botswana Paradox' by examining a small data set regarding the knowledge, attitude and practice of HIV/AIDS prevention by the Batswana people. The results indicate that the Batswana have a high rate of knowledge of the disease and how to prevent it. Data also shows that the Batswana also feel positively about their own ability to prevent infection, however a good percentage indicate that no matter what they do, they feel like they may become infected anyway. There appears to be somewhat of a condom culture in Botswana, as respondents agreed that they could negotiate condom use, abstain if there was no condom, not feel too shy about carrying a condom, and easily talk to their friends about condom use. Nonetheless, only half of respondents reported that their friends use condoms, and only 58% agreed that they could use a condom correctly. If the rate of HIV in Botswana is to fall, these numbers need to change. What can be done? How should PEPFAR monies be spent?

PEPFAR monies should support proven strategies for preventing HIV/AIDS transmission, unplanned pregnancy, and other sexual and reproductive health issues. PEPFAR should continue to promote the ABCs of HIV prevention but end the controversy. Drop the PEPFAR definition of ABC for the less controversial, more effective UNAIDS definition, which is:

- **A**bstinence or delaying first sex
- **B**eing safer by being faithful to one partner or by reducing the number of sexual partners

- Correct and consistent use of condoms for sexually active young people, couples in which one partner is HIV-positive, sex workers and their clients, and anyone engaging in sexual activity with partners who may have been at risk of HIV exposure

Abstinence-only-until-marriage education has failed in the U.S. and there is absolutely no evidence that it works anywhere else on earth. By inserting restrictive language into international agreements and refusing to fund the widest possible range of intervention strategies, the Bush Administration prevents service providers and advocates abroad from serving their populations as they deem most appropriate. Specifically, the Bush Administration should eliminate the abstinence-only until-marriage language from the Global AIDS Bill as well as the allowance for faith based organizations to exclude information about contraceptive methods, including condoms.

Next, PEPFAR monies should promote consistent condom use. As with most diseases, prevention is cheaper than the cure. The prevention of AIDS is not as elusive as its cure; the ordinary condom has proved to be one of the most effective methods of curbing the spread of AIDS. Countries that have embraced the use of the condom have found a significant drop in both the rate of AIDS and the rate of infection by other sexually transmitted diseases (i.e., Uganda). UNAIDS has verified that condoms, when distributed with educational materials as part of a comprehensive prevention package, have been shown to significantly lower sexual risk and activity, both among those already sexually active and those who are not. To promote consistent condom use, PEPFAR monies should address the need to:

- Address the negative perceptions about condoms (quality, breakages, discomfort, loss of pleasure, interrupting of lovemaking).
- Make condoms part of the sexual act / foreplay rather than an interruption to it.
- Dissociate condoms with promiscuity.
- Encourage men to carry condoms on their person.



- Persuades potential users that using condoms can be both comfortable and pleasurable; as part of the lovemaking process rather than an interruption of it.
- Increase awareness that condoms are easily available – both day and night, any day of the week, and nearby.
- Tackle perceptions about what do and do not constitute acceptable social norms, particularly those which relate to the role a woman plays in the decision-making process.
- Continue to reinforce messages that indicate that everyone is vulnerable to HIV and that it is not associated with a certain ‘type’ of person.
- Encourage women to be proactive and know how to use condoms correctly.
- Encourage women to be proactive and plan and think about condom use ahead of time to make condom use among women look normal and become part of their ‘psyche’.
- Encourage women to carry condoms on their persons).
- Address subjective norms through targeting role models in society (people need to believe that their religious leaders, parents, siblings and peers would approve of their using condoms).

Finally, work needs to be done to address the fatalistic attitude regarding prevention of the disease. As attitude is a strong determinant of behavior, more needs to be done to promote the fact that *AIDS is a preventable disease*. No one should simply resign him or herself to the inevitability of infection. Attitude and behavior are woven into the fabric of daily life. Advertising, political campaigns and other persuasive media messages are all built on the premise that behavior follows attitude and attitude can be influenced with the right message delivered in the right way.

The concept of "social marketing" combines cognitive - behavior components of psychology with social science and commercial marketing techniques to encourage or discourage behaviors by changing the attitudes that cause them. It is also a key part of public health education initiatives and should be a part of any PEPFAR financed activities. Campaigns

promoting positive attitudes towards condom use, abstinence, safe sex and other healthcare initiatives are all examples of social marketing in action. In effect, social marketing is "selling" attitudes and beliefs and - ideally - influencing associated behavior. This is desperately needed right now in Botswana to counter the fatalistic attitude that is standing in the way of knowledge translating into behavior.

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