

Institute of
Social Studies

GRADUATE SCHOOL OF DEVELOPMENT STUDIES

The Challenges of AIDS in Sub-Saharan Africa: Strategies, Policies and
Politics. A Case of Botswana

A RESEARCH PAPER PRESENTED BY

Scholastica Michael-Williams

(Tanzania)

In Partial Fulfillment Of The Requirements For Obtaining The Degree Of

MASTER OF ARTS IN DEVELOPMENT STUDIES
SPECIALIZATION: POPULATION AND DEVELOPMENT

MEMBERS OF THE EXAMINING COMMITTEE

Dr. Eric Ross

Dr. Jeroen van Ginneken

THE HAGUE, DECEMBER 1999

This document represents part of the author's study programme while at the Institute of Social Studies; the views stated therein are those of the author and not necessarily those of the Institute.

Research papers and theses are not made available for outside circulation by the Institute.

Enquiries:

Postal Address:

Institute of Social Studies
P.O. Box 29776
2502 LT, The Hague
The Netherlands

Telephone: -31-70-4260 460

Cables: SOCINST

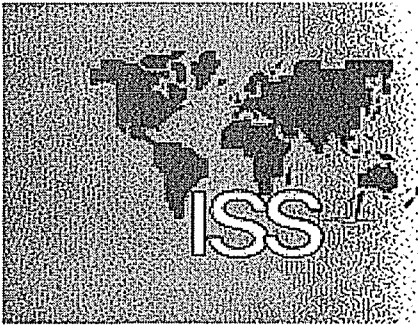
Telex: 31491 ISS NL

Telefax: -31-7--4260 799

e-mail: postmaster@iss.nl

Location:

Kortenaerkade 12
2518 AX, The Hague
The Netherlands



Institute of Social Studies

'Hereby I declare that:

1. – the attached is my own work,
2. – anything contained in the attached text taken from someone else's work (including, but not limited to, books, articles, newspapers, the Internet, lecture notes, another student's paper) has been properly referenced (that is, I have clearly indicated that it was taken from someone else's work and clearly identified that work) and
3. – I recognize and acknowledge that plagiarism is a serious academic offence which can lead to sanctions that can endanger my graduation.'

Printed name: SCHOLASTICA RIZKI MICHAEL - WILLIAMS

Signature:

A handwritten signature in black ink, appearing to read 'Scholastica Williams', written over a circular stamp or mark.

The Hague, 19 November, 1999

TABLE OF CONTENTS

Abbreviations.....	I
List of Tables.....	ii
List of	iii
CHAPTER ONE: INTRODUCTION.....	1
1.1 AIDS, Poverty and Development: An Introduction.....	1
1.2 Definition of Terms.....	5
1.2.1 AIDS and HIV.....	5
1.2.2 Seroprevalence.....	5
1.2.3 Sentinel Surveillance.....	5
1.2.4 Epidemic.....	6
1.2.5 Pandemic.....	6
1.3 Statement of the Problem.....	6
1.4 Research Questions.....	7
1.5 Objectives of the Research.....	7
1.6 Justification of the study.....	8
1.7 Methodology.....	9
1.8 Scope and limitations of the research.....	10
1.9 Organisation of the research.....	10
CHAPTER TWO: AIDS OVERVIEW.....	11
2.0 Introduction.....	11
2.1 Global Overview.....	11
2.2 AIDS in Africa.....	12
2.3 The AIDS situation in Botswana.....	15
2.3.1 Introduction to Botswana.....	15
2.3.2 AIDS in Botswana.....	16
2.4 Determinants of HIV Transmission in Botswana.....	19
2.5 Conclusion.....	19
CHAPTER THREE: LITERATURE REVIEW.....	21
3.0 Introduction.....	21
3.1 The link between HIV and AIDS.....	21
3.2 The spread of infection with HIV.....	26
3.3 The role of AZT in the prevention of HIV infection.....	27

CHAPTER FOUR: AIDS AND HIV IN BOTSWANA: THE NATIONAL RESPONSE.....	30
4.0 Introduction.....	30
4.1 National Policy on “HIV/AIDS”.....	30
4.2 National AIDS Programmes.....	32
4.2.1 National AIDS Control Programme.....	32
4.2.2 AIDS Council.....	33
4.2.3 AIDS and STD Unit.....	34
4.3 Some NGO Efforts.....	35
4.3.0 Background.....	35
4.3.1 AIDS Action Trust.....	35
4.3.2 Young Women Christian Association.....	36
Population services International.....	36
4.4 Networking: BONASO.....	38
4.5 The AIDS Epidemic in Botswana as Reported.....	38
4.5.0 Introduction.....	38
4.5.1 Prevalence of HIV in expectant Women.....	38
4.5.1(a) HIV Prevalence in Gaborone.....	38
4.5.1(b) HIV Prevalence in Francistown.....	41
4.5.2 Reported Trends in HIV Infection in Botswana.....	44
4.5.2(a) Trends in HIV Prevalence in Pregnant women in Botswana.....	44
4.5.2(b) Trends in HIV Prevalence among Men with Other STDs.....	45
4.6 Conclusion.....	48
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS.....	50
5.1 Conclusions.....	50
5.2 Recommendations.....	54
5.2.1 Health Research and development.....	54
5.2.2 Health Policies and Programmes.....	54
5.2.3 AIDS and Health Programmes.....	55
REFERENCES.....	56

Abbreviations

AIDS	Acquired Deficiency Syndrome
ACT	AIDS Action Trust
ASU	AIDS/STD Unit
AZT	The drug Zidovudine, also known as ZDV
BCW	Botswana Council of Women
BOFWA	Botswana Family Welfare Association
BONASO	Botswana Network of AIDS Service Organisations
CBOs	Community Based Organisations
CDC	Centres for Disease Control
DHS	Demographic and Health Survey
DPSM	Directorate of Public Service Management
GNP	Gross National Product
GoB	Government of Botswana
GPA	Global Programme on AIDS
HIV	Human Immune-deficiency Virus
ICPD	International Conference on Population and Development
IEC	Information, Education, and Communication
LDC	Less Developed country
MoH	Ministry of Health
MTP I	Medium Term Plan One
MTP II	Medium Term Plan Two
NAC	National AIDS Council
NACP	National AIDS Control Programme
NDP	National Development Plan (Number 8)
NGOs	Non-Governmental Organisations
PACT	Peer Approach to Counselling and Training
PSI	Population Services International
SANASO	Southern Africa Network of AIDS Service Organisations
SAPs	Structural Adjustment Programmes
SDRs	Special Drawing Rights
SIAPAC	Social Impact Assessment and Policy Analysis Corporation
STDs	Sexually transmitted diseases
STIs	Sexually Transmitted Infections
STP	Short Term Plan
TB	Tuberculosis
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Fund for Population Activities

UNICEF
USAID
WB
WHO
YWCA

United Nations International Children's Emergency Fund
United States Agency for International Development
World Bank
World Health Organisation
Young Women Christian Association

List of Tables

- Table 1: Selected Demographic Indicators (1971 – 1991)
Table 2: Sentinel Surveillance sites for 1997.
Table 3: Age specific HIV prevalence rates among pregnant women in Gaborone in 1996
Table 4: HIV prevalence rates among pregnant women in Gaborone in 1997
Table 5: Age specific prevalence of HIV in expectant women in Francistown in 1996
Table 6: Age specific prevalence of HIV in expectant women in Francistown in 1997
Table 7: Trends in the prevalence of HIV in Gaborone and Francistown
Table 8: HIV prevalence rates (%) in men with other STDs in Francis town
Table 9: HIV seroprevalence among men with other sexually transmitted diseases

List of Figures

- Figure 1: HIV prevalence among pregnant women in Gaborone
Figure 2: HIV prevalence rates in Gaborone in 1997
Figure 3: Age specific HIV prevalence rates for pregnant women in Francistown
Figure 4: HIV prevalence among pregnant women in Francistown (1997)
Figure 5: HIV trends in Gaborone and Francistown
Figure 6: HIV trends in men with STDs in Gaborone and Francistown
Figure 7: HIV prevalence rates in 1997 for selected sites in the country.

I dedicate this paper to a specific group of women: The women who leave their children behind, to go to school away from home for an extended period of time. I understand your cause, I have travelled your path, I have felt your pain.

Scholastica.

Acknowledgements

In the process of researching, writing and compiling the thesis, I have had to confront what I thought I knew my beliefs, ideas and prejudices. I believe I have grown as a person: through what I discovered, shared with friends & colleagues and from the pressure that is part and parcel of the process. I would like to acknowledge the special contributions of the following persons:

Ivor Williams – my husband, my partner, my pillar, my friend. I thank you for your unwavering support in all that I am, and all that I have chosen to do, despite the trials and tribulations of holding onto a full time job, and raising a small child. You alone know what I have been through this year, thank you for allowing me the space to do it. (I agree, let's not do this again!)

Liberator B. Michael Mallya: I am blessed to have a sister like you. For the year and a half you sacrificed to look after my baby while I am at ISS: I thank you, from the bottom of my heart. There are not enough words to describe what it all means to me, I could not have done this without you, literally. To you, I am forever indebted.

To Malaika: I know you do not fully understand what has happened in the first year of your life. Some day, when you are old enough to have your own children, you will understand why I did this. We will make up for lost time.

My parents, my brothers and my sisters: thank you for your love, encouragement, and commitment to all that I am, and all that I do. From you, I got the sound foundation of values and ideals.

To Eric B. Ross, my convenor, lecturer, supervisor and friend: From you I have learnt confront what I have been taught, critically analyse what I read, and to look at issues from all sides. In the process, never to be afraid of the other side of the coin, but to instead keep an open mind least there is something new to be learnt. You gave me the space and freedom to fully explore my ideas. This freedom was the most important aspect of the research-writing process for me. Thank you.

To a special woman: The late Sally Theresa Kakuli. Thank you for encouraging me to take up this opportunity to further my studies. I am sorry you are not there to rejoice with me now that it is indeed over. There is a lot I would have liked to tell you, but cannot. I can only trust that you knew, and all is not wasted. I will never forget you.

To Barbara Clarke: Woman, I do not know where to begin. With you I found true friendship at its best. Thank you for beanbag honest and frank at all times. Thank you for the love you have for Malaika, for the joy that you bring to her life, for the laughter and light in her eyes when she sees you. Thank you for being there for Libe, and thank you for being you.

To my friends in Botswana, especially Bruno, Virgil, Mel, Kassam, Nozipho, Hakani, Ruth and Francis: Thank you keeping my family sane through this.

To Feda: to you I have a lot to say, but most of it you already know. Thank you for going this last mile with me, for the talks, the late nights, the frustrations and the joys. I shall truly miss that. Thank you for sharing the good times and bad.

To Claudius Preville: Thank you for listening to me, for questioning my views and approaches, and for giving me advice when I needed it. Most of all, thank you for tirelessly reading my paper, and pushing me to address all angles. Your contribution was invaluable (and yes, this paper is dedicated to fathers who have been away from home too!).

To Ekambi Emmanuel: thank you for being there for me. In many aspects you have been an anchor for me. You have rejoiced in my triumphs, shared my pain and offered me both a shoulder to cry on and a forum to vent out my frustrations. "Countryman" I feel blessed to have had you as a friend. Thank you.

To Charles Lwanga and Peter Kintu: my EU (East African Union) brothers! Thank you for the debates, arguments, information, ideas etc. Because you did not agree with my approach, you highlighted issues of concern from the "other" camp, thus allowing me to ensure that my paper addresses itself to such issues.

To Michael Oruru, my other EU brother: with you, I shared the "AIDS struggle" from the beginning. We have come a long way, and learnt a lot about both AIDS and Africa. Thank you for being my "partner in crime", for being there to talk to, let off some steam and celebrate each small milestone along the way.

To Martin Blok: you are not the Welfare officer, you are the student WELFARE. Your presence at the ISS is a great asset to the participants. I felt this at the very beginning during orientation, and this has been strongly affirmed during the programme. Thank you from truly being there during both good times and bad. There could not possibly be a better person for your job, keep up the fantastic work.

To all the people in population and development programme for the year 1998-99: I will miss you. I have enjoyed sharing the learning experience with you.

To all the students from Tanzania in the Netherlands between 1998 – 1999. Thank you for the opportunity and forum to share, discuss, and exchange ideas. I am grateful for all the support we gave each other during my stay in the Netherlands. Keep wabongo-nl@egroups alive, it's crucial.

Last, but by all means not least, for all the friends I have made at ISS, both participants and staff: Lots have been discussed, debated, and philosophised between us. Thank you for all that you have shared with me. From all of you I have learnt the many aspects of life, from different countries. Thank you, thank you, thank youuuuu!

Chapter One: Introduction

1.1 AIDS, Poverty and Development: An Introduction

The population, poverty and development debate is an old age phenomenon. The discussions have centred on the population size, fertility trends and levels in developing countries that are viewed as the primary causes of the global problems today. This view begun with Malthus in the seventeenth century. In his great essay of 1798, Malthus argued that, whereas population growth is geometric, the growth of food supplies takes place at an arithmetic rate. This implies that in time, population growth will exceed that of food supplies thus leading to starvation. In his eyes, the poor had far too many children (Crook, 1997:3-80). Ross argues that Malthus and his contemporaries “were preoccupied with the question of property relations” at the time. The landlords and industrialists were not concerned about general misery and an end to mankind that would supposedly be brought about overpopulation, but felt threatened by the poor who begun to demand land which they felt was appropriated from them in the first place (Ross, 1998:73-78)). Hartmann submits that the World Bank “has slightly altered the previous Malthusian line of causality. While it now maintains that poverty, not the sheer weight of human numbers, is responsible for hunger and environmental depletion, it blames much of poverty on the economic consequences of population growth, thus continuing to hold the poor responsible for their own misery” (Hartmann, 1995:30-31).

In light of economic development, poverty and fertility levels, one must critically look at the conditions put forward by both the World Bank and the International Monetary Fund (IMF) for borrowing and accessing foreign aid respectively. Both of these institutions have made structural adjustment programmes a precondition for attaining foreign aid and loans. These conditions include but are not limited to; reduction/removal of government subsidies and social expenditure, a shift from subsistence agricultural production to export oriented production, privatisation of the public sector particularly basic education and primary health care, etc. The shift from subsistence farming to export production means less food is available for own consumption in the underdeveloped world. Bandarage points out that, “...shifts of natural resources into export production have threatened women’s subsistence production and their ability to feed their families. When dismissed from their jobs or when wages are cut due to SAPs, women are forced

to seek additional work, often in the informal sector as vendors, domestic workers, or prostitutes” (Bandarage, 1999:34). Whereas subsistence production comprised of grain, legumes and greens which basically made up a balanced diet, structural adjustment programmes have reduced this to the production of grain, mostly corn, wheat and maize. The result is increased vulnerability to infections and diseases, leading to general fatigue, poor health, and high mortality rates. In Africa, diseases such as malaria and tuberculosis are reported to be on the increase, and large numbers of people are reported to be infected with HIV and or dying of AIDS. In the eyes of the World Bank and IMF, globalisation is the means to alleviate poverty. These same institutions turn around and site high local fertility levels (and now AIDS) as the main obstacle to development, while downplaying the fact that policies they enforce are to blame for the same problems.

AIDS is said to be a “development problem” because it undermines development, resulting in loss of the lives of the majority of people in the economically active age group (labour force); loss of economic assets such as land, that are sold in order to cover the health or funeral costs of those who have AIDS; and lack of time to effectively engage in economic activities which is brought about by the demand for care for those who have AIDS. At the same time, AIDS is reported to cause the loss of developmental gains at the national level in terms of literacy & enrolment rates, high standards of living, human resource, life expectancy, low infant & childhood mortality, reproductive and maternal health etc, to name but a few (UNAIDS, 1999b). The UNAIDS (in collaboration with World Bank), reports that “Altogether, the epidemic’s impact on development has been far more severe than is generally realized, whether measured against the yardstick of life expectancy (in some countries this has declined to levels not seen since 1960s), child survival or economic costs, direct or indirect. With millions more becoming infected and joining the ranks of the over 30 million people alive today with HIV, it is clear that far worse is yet to come in terms of compromised socio-economic development” (UNAIDS, 1998:4).

At face value, one may easily accept the Malthusian and development economics argument that the poor are poor because they have too many children. Close examination however reveals that poverty is caused and worsened by macroeconomic policies in relation to population and

development that were born in the North. Such issues include, but are not limited to, debt repayments to the World Bank and its contribution to increasing levels of poverty in developing countries; unsustainable consumption patterns of energy (among others) in the North; land degradation, exploitation of natural resources and pollution. These processes are a result of the use of sophisticated production technologies and the unequal distribution of resources between North and South, which in turn cause poverty and stunted economic development in developing countries. *“Currently, the industrialized nations, with 22 percent of the world’s population, consume 70 percent of the world’s energy, 75 percent of its metals, 85 percent of its wood, and 60 percent of its food. The much smaller populations of Northern industrialized nations generate almost three quarters of all carbon dioxide omissions, which in turn comprise nearly half of the ‘manmade’ greenhouse gases in the atmosphere. They are also responsible for most of the ozone depletion”* (Hartmann, 1995:23)

Development objectives of the first world have been directly/indirectly aimed at controlling fertility trends in developing countries. Whereas at some point developing countries argued that “development is the best contraceptive”, developed countries have remained convinced that in order for a country to develop, fertility levels must be controlled. Bandarage points out that,

“ The response of the North to the problems of the Third World debt is “Structural adjustment”: a set of free market economic policies imposed by the international Monetary Fund and the World Bank as a condition for receiving “assistance” in the form of further loans (i.e. future debt). Adjustment loans come with stringent conditions ...cutbacks in state social welfare expenditures and subsidies...Frequently, the World Bank also requires acceptance of strong population control programs by Third World governments as a condition for receiving adjustment loans ” (Bandarage, 1999:33)

The documents presented at The Hague forum of ICDP +5 by the world Bank strongly advocate for change in Africa’s reproductive health strategies as a means to reduce HIV infection and poverty in the continent. At the said forum, the World Bank presented that the challenges of AIDS in Sub-Saharan Africa include: increasing multigenerational households that lack the middle (income-producing) generation; increasing numbers of female headed households which tend to be more vulnerable to poverty in AIDS-affected areas, as are orphan-headed households.

Additionally, World bank insists that “HIV/AIDS” has reversed many hard-won gains in human development such as increased life expectancy and reduced child mortality, the types of gains that are “prerequisites to the region’s fertility transition” (World Bank, 1999:1). The World Bank further contends that “although other diseases currently account for more deaths and disability in Africa than HIV/AIDS, already HIV/AIDS has worsened indicators of economic and human development, increased poverty among affected families and communities, and resulted in dramatic changes in the social structure of households... But this epidemic is not solely a health issue – it is a *development* issue, a major threat to Africa’s economic growth” (World Bank, 1999:3).

The expansion of productive power and market role goes along side the emergence of hunger and famine. Where some people die because they do not have enough to eat, others are dying from eating too much. Sen submits that during famines, people do not often die from shortage of food, but as a result of failure to be entitled to the available food. The command over food reflects the relative power people have for survival (Sen, 1994:542-476). This has implications on not only for the calorie and nutrient intake, but also the body’s vulnerability to infections. Globalisation has translated to free market operation for developed countries and continued marginalisation and impoverishment for third world countries. Poverty has been worsened by macroeconomic policies in relation to population and development that were born in the North. Structural adjustment Programmes were supposed to improve the performance of the developing economies, increase productivity and raise the standards of living of the people in those countries. In reality, these have contributed towards increasing the economic vulnerability of the poor, increased inequality in the distribution of resources and incomes, poverty and general misery. This paper takes a critical look at the debates surrounding both AIDS and HIV, in light of population control and development debates.

1.2 Definition of terms

1.2.1 AIDS and HIV

Acquired Immune Deficiency Syndrome or AIDS, as it is most commonly referred to today, is a “*disease*” whose existence became apparent in early 1980s. Although AIDS is referred to as a disease, it is in fact a *condition* characterised by the breakdown of one’s immune system. A person, who has this condition therefore, can die from any kind of disease, from the common flu to cancer, for lack of natural defences against illness and infection. Over the years, there has been a widespread tendency to use the terms AIDS and HIV interchangeably to mean the same thing, although the two are quite different. This seems to have become as acceptable as referring to AIDS as a *disease*, and it’s existence as a *pandemic*. Furthermore, the general public seems to have accepted the argument that HIV causes AIDS although scientifically the relationship between the two is so far based on correlation. As Stine contends;

“Much continues to be written about HIV/AIDS. Some of it, especially articles, has been less than accurate and has led to public confusion and fear. HIV infection is not AIDS. HIV infection is now referred to as HIV disease. AIDS is a syndrome of many diseases, each resulting from an opportunistic agent or cancer cell that multiplies in humans who are immunosuppressed” (Stine 1996:27).

HIV has been taken for granted as the early stages of AIDS, though there have been cases where HIV positive people have lived for years without developing AIDS, as well as cases whereby people have developed AIDS without prior infection with HIV (Thomas et al, 1994:1).

1.2.2 Seroprevalence

The prevalence of an infection as detected in blood serum (WB, 1997: xxv) may also be referred to as Seropositivity.

1.2.3 Sentinel surveillance

A systematic collection of data on either incidence or prevalence and trends of HIV infection in selected population, at selected sites. (AIDS/STD Unit, 1997:2).

1.2.4 Epidemic

A sudden unusual increase in cases that exceeds the number expected on the basis of experience (World Bank- confronting AIDS, xxiii)

1.2.5 Pandemic

An epidemic occurring simultaneously in many countries (World Bank, 1997:xxiv)

1.3 Statement of the Problem

The AIDS issue has become one of the greatest areas of global concern in the field of population and development in the past decade. Whereas population explosion preoccupied international population debates for years, one of the greatest of current concern is AIDS and its effects on development, sustainability and well being.

Internationally, debates on various aspects of AIDS such as: the relationship between HIV and AIDS, modes of transmission in different regions, high risk groups, the spread and levels of HIV and AIDS globally, as well as the origins of AIDS are on-going. In the case of Botswana, it is argued that HIV infection and AIDS prevalence are major problems that require urgent attention. Furthermore, AIDS is stated as a major cause of morbidity and mortality in the country. Two years after the first AIDS cases were reported, the government of Botswana set up the National AIDS control Programme (NACP) and has since undertaken numerous interventions aimed at addressing this “problem” (Republic of Botswana, 1997:viii). In Botswana as in other African countries, attempts to address the problem of AIDS and HIV have focussed on the prevention of infection with HIV. Such measures have primarily focused on prevention of transmission through unprotected sexual intercourse in terms of provision and promotion of condoms for safer sexual intercourse. Botswana has intensified efforts in the promotion of sexual abstinence before as well as outside marriage, correct and consistent condom use with all sexual encounters and remaining faithful to one sexual partner. These approaches have come about as a result of the link that is argued to exist between HIV and AIDS, i.e. that HIV causes AIDS (Republic of Botswana, 1997:25-26).

Figures that are reported, estimated or extrapolated indicate that Botswana continues to be among the world leaders in HIV prevalence rates. "Estimates of the HIV epidemic since the inception of the sentinel surveillance in Botswana show that the number of people infected by HIV increased from 59 000 in 1992 to 180 000 in 1996. It is currently estimated that the HIV infection rate doubling time in Botswana is two years" (Republic of Botswana, 1997:8). According to Webb, the patterns of HIV prevalence in Botswana show that women aged 20-24 years, and early teenagers have the highest HIV prevalence rates. He attributes these rates and high risk of infection to economic, sociological and physiological factors (Webb, 1997:8). Botswana, which shares a boarder with South Africa, has for a long time supplied migrant labour to the mines in South Africa. Husbands and wives have lived apart for generations. This is argued to be one of the contributing factors to the spread of the condition, since men end up sleeping with prostitutes in the absence of their wives during the prolonged periods apart. The concentration of the virus is on the eastern part of the country, which has the highest population density (Webb, 1997:17-18).

1.4 Research Questions

- 1 To what extent is AIDS spreading in Botswana?
- 2 Have the current measures and efforts to reduce the spread of AIDS in Botswana had a great impact?

1.5 Objectives of the research

This research will be based on two objectives. These are:

- i) To explore the measures that have been put in place to address the AIDS epidemic in Botswana
- ii) To explore whether the emphasis on "AIDS" may have obscured the approach to the treatment of tuberculosis and sexually transmitted diseases

1.6 Justification of the study

The AIDS “pandemic” has brought about many challenges for Africa, among which the issues, vertical transmission of HIV from mother to unborn child, because the infection of unborn infants with any kind of fatal diseases poses a threat to the survival of future generations. Currently, vertical transmission of HIV is estimated to affect between 30 – 45% of all babies born to HIV positive mothers (Anabwani, 1997:57). This occurs in *Utero*, during labour and delivery, and after birth, through breast milk. The government of Botswana has opted to address mother-to-child transmission of HIV through the provision of Zidovudine (better known as AZT) in collaboration with UNICEF, in an attempt to reduce HIV transmission from mother to child (Botswana Daily News, 1999:1). When expectant women took short-courses of AZT in Thailand the result was a reduction in the risk of vertical transmission from mother to child by half, providing these infants were not breast-fed after birth (UNAIDS, 1998:4). This approach raises other issues such as the effects of the absence of breast-feeding on infant health, supplementary feeding for infants whose mothers are HIV positive and are of low economic status, as well as the overall affordability of such a programme on a national scale. In Botswana, the participation of women in the labour force is less than that of men, more women than men have lower paying jobs, and female headed households are most vulnerable to poverty. It is argued that these factors make women more vulnerable in terms of poverty, hence susceptible to livelihood strategies that open them to the risk of HIV infection (Republic of Botswana, 1997:7).

Tuberculosis and its association with HIV and AIDS is another issue that warrants urgent attention for Botswana particularly. Tuberculosis is and has been one of the major health concerns in Botswana since the 1930s (Chaba, 1997:100). At the National conference on AIDS and HIV in 1997, Chaba informed the forum that “Between 1989 and 1996, the reported TB cases increased at a rate of 101%, from 202 to 407/100 000, one of the highest in the world. ...Between 1985 and mid 1996, a cumulative total of 12 047 cases of HIV related illnesses had been notified in Botswana, of which 37 772 met the AIDS definition”(Chaba, 1997:101). Botswana has very high rates of tuberculosis and since TB is one of the diseases associated with AIDS, patients are increasingly defaulting TB treatment because of the stigma attached to it. Similarly, the prevalence of sexually transmitted diseases in Botswana is relatively high.

Currently, the two groups at the highest risk of infection with STDs are pregnant women and teenagers, specifically aged 15 – 19years. Botswana has a high teenage pregnancy rate, which serves as an indication of both early sexual activity and unprotected sex (Republic of Botswana, 1997: 13).

Measures to combat the spread of AIDS in Botswana have been in place for over ten years but HIV infection rates and reported AIDS cases are still increasing. It is maintained that the economic, social and demographic impacts of AIDS are said to be high for Botswana. It is therefore imperative to review the intervention efforts in light of the costs and financial implications for the economy as a whole, and the opportunity cost of focusing on heterosexual transmission to other health needs and demands.

1.7 Methodology

The research will address itself to the current situation of AIDS in Botswana, in terms of the prevalence rates, trends of infection with HIV, and modes of transmission. The research is both a qualitative and quantitative analysis of the existing literature on AIDS and HIV in Botswana and explores the arguments presented in the same. As a result of the use of secondary data, it was not possible to do extensive statistical analysis of the data in question. For the most part, statistics used are borrowed from other research works, and exploratory data analysis is used as a basis for arguments presented here. Specific attention is given to both sexually transmitted diseases and tuberculosis as examples of opportunistic diseases whose prevalence is argued to have increased in Botswana over the years (Republic of Botswana, 1997:11). Data used include national sentinel surveillance statistics and reported cases for both HIV and AIDS.

The study looks at the policies that have been formulated to address the prevalence and spread of both AIDS and HIV in Botswana, and the effect these have had in attempting to reduce rates of infection with HIV. An overview of the whole AIDS situation in Botswana is presented, because efforts in this area are not only those of the government, but also those of charity & non-profit making organisations, NGOs, civil society, churches, private sector initiatives and regional collaborations. In doing so, the researcher hopes to highlight the challenges of the AIDS

epidemic in Botswana, thus contribute towards the upgrading or reformulation of policies in this area. In the process, the researcher offers suggestions for strengthening such measures, and suggestions on what possible alternatives could be.

1.8 Scope and limitations of the research

The main limitation of this research is that the data on which it is based cannot be used as being representative of Botswana as a whole. This is because the said data were obtained from the records of incidences of AIDS in pregnant women and men who have been treated for STDs. This is due to the fact that AIDS testing is supposed to be done on a voluntary basis, but since it has sexual connotations and stigma, not many people are willing to undertake the test on their own free will. As such, the data used herein not only represents a fraction of the general population, but also was not standardised and errors therein removed, hence this presents limitations to my research questions.

1.9 Organisation of the research

This research paper comprises five chapters. Chapter two provides an overview of the AIDS situation in the world, as presented by UNAIDS, WHO and the World Bank. The said chapter aims at orienting the reader to the “official Picture” (what the public at large) encounters in relation to both AIDS and HIV. A review of the literature in the field of AIDS is presented in chapter three, with a critical look at the “issues of concern” particularly in relation to Africa. Chapter four addresses itself to AIDS related issues, specifically in the context of Botswana. This chapter synthesises arguments presented in relation to AIDS, the National policy on AIDS, and programmes that stem from it, in the process of answering the research questions, and meeting the objectives of the research. In conclusion, chapter five revisits the arguments presented in relation to AIDS as a development problem, and measures suggested and put in place to deal with “the problem”. In doing so, the chapter highlights the gaps and shortcoming of AIDS views and efforts, thus making recommendations on how these could be improved.

Chapter Two: AIDS Overview

2.0 Introduction

This chapter provides an overview of the global aids situation as presented by UNAIDS. This is to orient the reader to AIDS has been presented as a global problem which is out of control, particularly where Africa is concerned. This chapter also introduces the reader to Botswana in two parts. The first section presents a brief profile of Botswana in relation to demographic and socio-economic variables. The second part is dedicated to the official AIDS situation as presented by the Ministry of Health, through the AIDS/STD Unit, the department charged with the lose responsibility of the governments' efforts on AIDS and HIV.

2.1 Global Overview

In the past decade, AIDS has become a global concern and is promising to be one of the top concerns at the international level for years to come. Judging by the media reports, the problem seems to be intensifying regardless of how one looks at it. The statistics reported world-wide indicate that although it has been over a decade since AIDS came into the limelight, figures are rapidly increasing. According to UNAIDS, some 33.4 million people (both adults and children) are estimated to be living with either HIV or AIDS as of the end of 1998. Furthermore, UNAIDS argues that the developing world now accounts for over 95% of the people infected, and for 95% of the lives lost to AIDS since the start of the epidemic. By far, the most affected continent is reported to be Africa, whose estimates stand at over 22.7 million, followed by South and South East Asia with 6.7 million, and Latin America whose figures stand at 1.4 million (UNAIDS, 1999c:16). Economically, the most affected regions seem to be those of less developed nations, whose economic productivity is reported to be 8% of global economic production (UNAIDS, 1999:1) Other countries reported to have highest HIV rates (after African countries that is) include those in the Caribbean region, Cambodia and Thailand, while "Central Europe and the former Soviet union had hardly any HIV infections just a few years a go" (UNAIDS, 1999c:16). It has also been reported that in major cities of Argentina, Brazil, Cambodia, India and Thailand, more than 7% of pregnant women now carry HIV (World Bank, 1997:13).

2.2 AIDS in Africa

Up until the early 1980s, most of the countries in the African continent were somewhat ignorant of AIDS. Facts, opinions and arguments among scientists, researchers and medical personnel are divided on not only the origins of AIDS (Africa versus elsewhere), but also on when the first cases of AIDS were reported in Africa. Debates on the levels, trends and modes of transmission for "African AIDS" are controversial and ongoing. Due to the uncertainties surrounding the AIDS issue for Africa, one can only assume that the first AIDS cases were reported in Africa in the early 1980s, anytime between 1981-1987. In the mean time, studies on AIDS in Africa have been mainly on Seropositivity, i.e. focussing on specific segments of the population such as, prostitutes, truck drivers and pregnant women. Once the data is obtained for certain risk groups in a country, specific assumptions are made and estimates are made for the country as a whole (Webb, 1997:12).

AIDS and Africa in the 1990s have almost become synonymous. Upon declaration that indeed one is from Africa, one is immediately bombarded by questions about "African AIDS". The questions vary from whether most people are dying of AIDS or have full blown AIDS, the impact of AIDS on the family, the household and the economy, to whether or not our "out of control" population levels are finally under control as a result of AIDS. For most of the African people, AIDS has become part of everyday life, much as malaria has been to those originating from equatorial Africa. This is a result of the statistics released by international organisations such as the World Health Organisation (WHO), the World Bank, and UNAIDS. The said statistics have been actively and tirelessly publicised by the international media. Globalisation has made it possible for Africans as a whole to have easy access to Cable News Network and British Broadcasting Corporation who repeatedly air documentaries on the AIDS epidemic in Africa.

AIDS has not only become a pandemic in Africa, but the AIDS pandemic is reported to have become *"the leading cause of death in Africa. In 1998 alone, two million people died of AIDS in the African countries south of the Sahara, and millions of new HIV infections occur there every year, foreshadowing even greater loses in the future. In the world's nine most severely-affected*

countries (all of them located in Africa) where at least one-tenth of the adult population has HIV, life expectancy for a child born in 2000-2005 will drop to 43 years from the pre-AIDS expectation of 60 years of life” (UNAIDS, 1999c:17). Statements such as these have become the norm in the past decade. Needless to say, figures on HIV infection and AIDS statistics are mostly estimates or extrapolated by experts.

HIV is reported to be transmitted through: blood transfusion with infected blood, unprotected sexual intercourse with an infected person, vertically from mother to child, and through the use of medical equipment and needles, which are infected with HIV. The main modes of HIV transmission in Africa are said to be heterosexual intercourse and to a certain degree, vertically from mother to child (Sanders and Sambo, 1991:158). These two modes of transmission alone have been estimated to be responsible for about 80% of all transmissions in Africa, with an almost equal probability of infection between men and women. In other parts of the world, homosexuals, gay men and haemophiliacs were reported to have a high chance of getting infected (Panos, 1988: i).

There are various factors that are argued to contribute to the rapid spread of HIV infection in Africa. Risky sexual behaviour is presented by most as the core basis of the AIDS problem for Africa. AIDS in Africa is reported to spread mainly through heterosexual contact with infected persons, who are reported to be prostitutes or commercial sex workers. The World Bank maintains that “Prostitutes represent a ‘core group’ of HIV transmitters. Other identifiable core groups such as clients of prostitutes, truck drivers and the military are active in transmitting the virus to prostitutes and other partners” (World Bank, 1999:6). Other factors contributing to the spread of HIV infection in Africa include the re-cycling of contaminated needles and other medical equipment, while vertical transmission is estimated to be responsible for between 20-50% of all infections (Haq, 1988: 24). Dawson contends that the current risk factors for African AIDS are: living and working in an urban environment, having a large number of heterosexual partners, injections with unsterilised syringes, and lastly, the presence of genital ulcers possibly related to a sexually transmitted disease. Furthermore, Dawson draws similarities between the factors deemed to contribute to the spread of AIDS in Africa, and those that were responsible for both the introduction and spread of venereal syphilis earlier in this century (Dawson, 1988: 57).

With the progression of the “AIDS epidemic” over the years, certain diseases and conditions became “AIDS diseases” or “opportunistic diseases/infections”. These are conditions and diseases that have become either directly linked with HIV infection and AIDS or indirectly associated with the same. Needless to say, such “diseases” have varied over time, and others have in fact fallen off the list and are no longer classified as such. This is due to the fact that the syndrome and its definition has been altered with time, and as a result of research findings by various actors, among whom the Centres for Disease Control (CDC). “In Africa the most common opportunistic infection are tuberculosis, cryptococcal meningitis, herpes simplex infection, oral or oesophageal candidiasis, cryptoisporidiosis, central nervous system toxoplasmosis and skin rashes. Chronic diarrhea and weight loss are quite common...Kaposi’s Sarcoma is the most common malignancy occurring in patients with AIDS, and in Africa occurs in 2-20% of patients” (Haq, 1988: 12). It has also been argued that in sub-Saharan Africa, “the high level of other STDs, especially those involving genital ulceration, has been considered an important factor exacerbating the transmission of HIV in the region” (Ford, 1994:85). Once more, opinions vary on the importance of transmission through blood transfusions versus through risky sexual behaviour. While some argue that the stated modes occur more frequently than in the West (Sanders and Sambo, 1991:158), others maintain that “HIV infection from contaminated blood in transfusions and health related infections is a minor and declining source of infection, as blood screening and other health service measures are expanded” (Ford, 1994:85). Elsewhere, it has been argued that the rapid progression of the spread of AIDS in Africa can be attributed to the more frequent infections and decreases nutritional (and therefore immunological) status of patients in Africa (Sanders and Sambo, 1991:158).

2.3 The AIDS situation in Botswana

2.3.1 Introduction to Botswana

Botswana is an African country located within the southern African region. The country shares borders with Namibia in the West, South Africa in the South, and Zimbabwe in the North. Botswana's land area amasses 582 000 km², and her total population is estimated to be 1 326 796 as of 1991 census survey. About 87% of Botswana's total land area is covered by the Kgalakgadi desert in the western region, thus this part of the country is sparsely populated, while the eastern region has high population densities, therefore the concentration of development and infrastructure in the same (Republic of Botswana, 1997:3-4)

Table 1: Selected Demographic Indicators (1971 – 1991)

Indicators	1971	1981	1991
Population (Million)	596,944	941,0276.2	1,326,796
Total Fertility Rate	7.1 (6.5*)	(6.6*)	5.2
Population Growth Rate %	1.8	4.7	3.5
Crude Birth Rate %	45.5	47.2	39.3
Crude Death Rate %	13.7	13.9	11.5
Infant Mortality %	92	71	45
Under-five Mortality %	151	109	56
Life Expectancy			
All	55.5	56.5	61.7
Males	52.5	52.3	59.4
Females	58.6	59.7	65.9
Population 5-15 (%)	29.9	28.8	28.6
Population 15-49 (%)	39.4	40.8	45.5
Urban Population (%)	91.4	81.0	54.3
Gender-Ration (Males/100 Females)	84.0	89.0	92.0
Dependency Ratio(Per 100)			
Age <15			
Age >65	101	99	83
Total (Age<15) Plus (Age >65)	12	11	10
Population Density (Per Km ²)	113	11	93
	1.0	1.60	2.3

Source: Botswana Population Census 1971, 1981 and 1991 *Adjusted. (MTP II, 1997:3)

Demographically, Botswana is reported to have an annual population growth rate of 3.5 percent, which is rated among the highest in Africa, with a young population structure. At the last census (1991) approximately 29% of Botswana's population was below 15 years of age; which at the time represented a dependency rate of 83/100 (Republic of Botswana, 1997:4).

Botswana's economic performance is one of the best experiences in Africa. As a result, the country ceased to be called less developed country LDC in the early 1990s when it officially graduated into an 'upper middle income country. Mining constitute the country's economic backbone with diamonds making up 30% of GNP, while 70% comes from exports (among which beef), and 50% from government revenues. While other countries in Africa are struggling through the effects of structural adjustment programmes, poverty and balance of payment deficits, Botswana is reported to have amassed 12,177 million Pula and GNP per capita of P8, 054 (Approximately US \$ 1790) in 1994/95 (Republic of Botswana, 1997: 5).

Although Botswana has a shining record in terms of economic performance, the quality of life enjoyed by the majority of the people is not as may be expected. Vast income differentials between the poorest and richest population groups within the country exist, with female-headed households forming the majority of households living in poverty. The Medium Term Plan states that "The poorest 40% of the population get only 11.6% while the richest 20% get 59% of the income. The most recent available data show that 47% of the population live in poverty, 62% of these are in rural area while 38% are in urban areas" (Republic of Botswana, 1997:5).

2.3.2 AIDS in Botswana

In Botswana, the figures and statistics on AIDS and HIV are obtained through sentinel surveillance survey that has been in place since 1992, and also through the records of the attendance of clinics for treatment of STDs. The sentinel surveillance focuses on pregnant women who routinely attend ante-natal care at public health clinics. The STD monitoring is for men who go to the clinic with STDs. That is to say, people who are neither pregnant nor have STDs will never be tested for AIDS unless they voluntarily request the test. "...Pregnant women seeking ante-natal care are assumed to represent the so-called 'general population' and in particular the sexually active (15 – 49) age group, whereas males with STDs are assumed to

represent the groups at high risk of HIV infection, given the close association between STDs and HIV infection” (Ministry of Health, 1997; 40 – 41).

Table 2: Sentinel Surveillance sites for 1997.

Sites	ANC	STD	Total
	(Females only)	(Males only)	
Gaborone	800	300	1100
Francistown	800	300	1100
Maun	300	250	550
Tutume	300	250	550
Selibe Phikwe	300	250	550
Kweneng East	300	250	550
Kweneng West	300	250	550
Southern	300	250	550
Ghanzi	300	250	550
Total	3700	2350	6050

Source: Sentinel survey, 1998:3

The sentinel surveillance is conducted mainly in cities, these having been selected based on population size. In Gaborone (the capital) and Francistown (near the border with Zimbabwe) the surveillance is continuous. Gaborone and Francistown are the only cities in Botswana, and population density and movement is highest between the two. In the other twelve sentinel sites the surveillance alternates every other year. As a result, although data for the prevalence of HIV exists for a selected number of sites in Botswana, continuous statistics for the said rates exist predominantly on Gaborone and Francistown.

AIDS was first diagnosed in Botswana in 1985 at a mining hospital when a small survey of sexually transmitted diseases was conducted. At the time, more HIV carriers were identified through contact tracing, and the persons who tested positive for the HIV antibodies were aged 15

– 40. The main mode of transmission was reported to be through heterosexual contact with infected persons, with only 3 cases of transmission via blood transfusion occurring before blood screening was instituted (Lesetedi et al, 1988:89).

Statistics from the sentinel surveillance show that the percentage of women infected with HIV is on the increase in both Gaborone and Francistown, though the figures show a slight drop in prevalence rate in Francistown between 1996 – 1997. In Gaborone, the infection rate among pregnant women increased from 14.9% to 34%, while in Francistown it increased from 23.7% to 42.9% between 1992 and 1997. This implies that three out of ten and four to ten pregnant women are infected with HIV in Gaborone and Francistown respectively. The drop in prevalence rate in infection in Francistown is reported to be from 43.1% to 42.9% between 1996 and 1997 (Mulwa, 1997: 41). However, according to the seventh sentinel survey, these figures went up to 42.96% (43%) and 39.08% in 1998 Francistown and Gaborone respectively (AIDS/STD Unit, 1998:7).

The monitoring of HIV infection through STDs among men show a similar picture with 1997 recording the highest prevalence rates for Francistown, Lobatse and Gaborone, whose figures are 60%, 49.3% and 39.8% respectively. That is to say, of all the male patients who went to clinic in 1997 with an STD, in Francistown 60% of them reportedly tested HIV positive (Mulwa, 1997:42). Mulwa also states that the lowest rate was reported in Kgatleng (33.7%), but argues that this should be interpreted with caution. At the same time, it is reported that “In many areas, over half of hospital beds are occupied HIV/AIDS patients with opportunistic infections, of which TB is the most common” (Chaba, 1997:102).

The estimates based on the 1997 sentinel survey are high for the country as a whole “... the AIDS/STD Unit estimates that over 207 000 individuals are likely to have been infected with HIV in Botswana. This is an increase of 149,000 infected individuals between 1992 and 1997. Fourteen percent of the total population of Botswana may have been infected with HIV and 25% of the sexually active and economic productive age group (15 – 49) are infected with HIV” (Mulwa, 1997: 42)

2.4 Determinants of HIV Transmission in Botswana

According to the national policy on “HIV/AIDS”, the main mode of HIV transmission in Botswana is through heterosexual intercourse (Republic of Botswana, 1997:14). The fundamental causes of the rapid spread of HIV infection in Botswana are reported to be located in the socio-economic and cultural factors. Specifically, the unequal distribution of economic resources between men and women coupled with cultural norms and values that are gender insensitive are said to be the root cause of the spread of HIV. Due to poverty and unemployment, it is maintained that people in Botswana then resort to “risky” sexual behaviour in the forms of: coercive sex; recreational sex; sex as an economic good; as well as conventional sexual activity for reproductive purposes (Republic of Botswana, 1997:14-18). Unprotected sexual intercourse is presented as the resultant of all other factors, and the basic way in which the majority of people in Botswana are infected with HIV (Republic of Botswana, 1997:14-18)

2.5 Conclusion

The conventional approach to “AIDS” in Botswana is clearly the path that the government and policy makers have chosen to take in the official approach and interventions to the same. The standing argument that AIDS in Africa is embedded in cultural practices and the said “widespread” sexual promiscuity and multiple sex partners in the continent seem to be quite accepted in the Botswana context. Waite, reports that this argument dates as far back as the colonial period, when “missionaries denounced polygamy, puberty rites were regarded as evil, and African dress was considered immoral.” Furthermore, she points out that “Syphilis, the other important sexually-transmitted disease of the twentieth century, brought about very similar fears, prejudices, inequalities and inequalities in treatment” (Waite, 1988:153). Given that this is the case, we would indeed expect that the focus of the approaches and interventions would be on changing “risky” sexual behaviour. Researches on sexual promiscuity and risky sexual behaviour have to a large extent been led by the hypothesis that such are embedded in the African culture. If one begins with this in mind, it becomes easy to find data to fit such a claim. Aspects of the African culture (that have prevailed much less in the twentieth century than ever before!) such

as: wife inheritance circumcision; polygamy etc suddenly become a “risk factor” in the spread of AIDS.

In Botswana, the official policy on “HIV/AIDS” acknowledges that gender inequality in the social and economic sectors puts women at a disadvantage, leading to lack of, and/or poor access to economic resources, which in turn translates to gender inequality in the labour market, unemployment, poverty and high population mobility which are reported to lead to unprotected sexual activity (Republic of Botswana, 1997:17). Invariably, whether or not HIV causes AIDS, gender blind policies and programmes, coupled with increasing market role, have resulted in increasing vulnerability to poverty, malnutrition and infection particularly for women and children. The Panos Institute shares the opinion that poverty is a major factor influencing the spread of HIV in developing countries. “With exceptions, the overriding reason for the rapid spread of HIV has been the high correlation that exists between poverty and vulnerability to the virus, a correlation that has led to high rates of infection in the most economically deprived populations of cities as far as Bombay, Edinburg, New York and Rio de Janeiro” (Panos, 1992:10).

Chapter Three: Literature Review

3.0 Introduction

This chapter reviews existing literature in the field of AIDS and HIV. It is divided into three sections: The link between HIV and AIDS, The spread of infection with HIV and the role of AZT in the prevention of HIV infection. This chapter looks at arguments presented by the orthodox AIDS view, and those presented by an increasing number of researchers and scientists with opposing views.

3.1 The link between HIV and AIDS

The international debate in the field of HIV and AIDS is centred along various aspects such as the origins of AIDS, risk groups, factors that contribute to its rapid spread in different regions, the figures, the levels and trends to name but a few. These debates raise numerous contradictory issues especially in as far as Africa is concerned. This paper explores some of these issues, but the researcher recognises that interesting as such issues may be, it is neither possible to look into them all, nor to review all works that have focussed on this problem, even for Africa. Although some medical aspects of the issue will be presented and discussed herein, the main focus of the discussions will be on social aspects.

I begin by addressing the link that is argued to exist between HIV and AIDS. Once again, scientists are divided between two main camps on the issue. One side presents that there is a direct link between AIDS and HIV, that HIV is not only a precondition for developing AIDS, but also the cause of AIDS. On the other camp, scientists maintain that not only is there no direct link between HIV and AIDS but also the two can, and sometimes do, exist independently. That is, if a person is infected with HIV, it does not necessarily mean that he/she will develop AIDS. It has been established that "There are many cases of persons with all the symptoms of AIDS who do not have any HIV infection. There are also many cases of persons who have been infected by HIV for more than a decade and show no signs of illness" (Thomas *et al*, 1994:2).

The argument that once one is HIV positive one will develop AIDS in due course and subsequently die from it, is illustrated by the following paragraph:

“The cause of AIDS is a virus known as human immunodeficiency virus or HIV. The evidence that HIV causes AIDS is overwhelming. First, evidence of HIV infection is easily found in patients with AIDS when such evidence is sought. Second, the virus has been isolated and grown in pure culture from persons with the disease. Finally, studies of AIDS cases resulting from blood transfusions have documented the transmission of HIV to previously uninfected persons who have subsequently developed the disease” (CDC, 1999a:1).

Elsewhere, the Centres for Disease Control (CDC) maintain that AIDS is caused by a virus called human immunodeficiency virus or HIV. Furthermore, HIV is found in the blood, semen and vagina secretions of an infected person. HIV is reported to be spread by unprotected sexual intercourse with an infected person, needle sharing among injecting drug users or, less commonly and now very rarely, through transfusion of infected blood or blood clotting factor. In addition, babies born to HIV infected women may become infected before or during birth, or shortly after birth through breast feeding (CDC, 1999b:1).

The conventional view that HIV is the cause of AIDS is supported by the majority of scientists and researchers to date, and has remained as the mainstream for years. Ever since AIDS became a public concern, we have continuously been told that the evidence to support the claim that HIV causes AIDS is overwhelming, though it has not yet been established exactly how this happens. Close examinations of these facts however indicate that some of the issues are indeed questionable. Through their research, scientists tell us that they found biological facts that support the HIV causation theory. Their evidence includes: the fact that HIV is still the only virus to preferentially infect CD4 cells (T cells); that clinical HIV isolates will selectively kill fresh human CD4 cells; and the fact that the virus infects and kills T cells of the immune system thus leading to an inevitably fatal immune deficiency after an asymptotic period of at least 10 years. Essex, the chairman of the Harvard AIDS Institute contends that “the epidemiologic association between HIV and AIDS is overwhelming”. When one embarks in search for AIDS as a ‘disease’ in a medical sense, it becomes difficult to find a reference that gives details on exactly what AIDS is. On the contrary, literature on both AIDS and HIV in the conventional sense give a list of conditions and some diseases that have come to be directly linked to, or indirectly

associated with AIDS. Essex presents that “although such evidence is circumstantial, these epidemiological connections, when taken together, make a compelling case that HIV causes AIDS” (Harvard, 1994:2).

Highly technical and medical terms are used to describe AIDS that may not be clear to majority of the non-medical people. Medical science has gone to the extent of defining for example what malaria is, its causes, signs, and symptoms, the various stages and types of it as well as methods of prevention and treating the disease, to the extent that the average person would fully understand it. When it comes to AIDS, most of us are baffled by the whole concept and technical explanations, that it becomes easier to accept that HIV causes AIDS than to try and understand it. On the subject of AIDS, we are not allowed to think, question or speculate, for we are not medical specialists. On this subject, we are asked, persuaded, cajoled, challenged and ordered to leave it to the medical “specialists” who know best.

Through the literature on the causation relationship between HIV and AIDS, it is not clear whether or not HIV is the only virus that leads to the prevalence of low T-cell count. Regarding this issue, Hodgkinson points out that “...people whose immune systems have been activated by several other conditions, including tuberculosis and multiple sclerosis, can trigger the same reaction, giving a false positive result” (Hodgkinson, 1993:1). Furthermore, “Heavy exposure to sperm can also set up an antibody reaction, especially when entering the body through anal intercourse” (Hodgkinson, 1993:2).

Some scientists maintain that HIV does not cause AIDS, at least not without the presence of other unknown factors. This position questions the link that has been established between HIV and AIDS in the first instance. The following extract illustrates this view:

“Most people believe they know what causes AIDS. For a decade, scientists, government officials, physicians, journalists, public-service ads, TV shows, and movies have told them that AIDS is caused by a retrovirus called HIV. This virus supposedly infects and kills the “T-cells” of the immune system, leading to an inevitably, fatal immune deficiency after an asymptomatic period that averages 10 years or so. Most people do not know-because there has been a visual

media blackout on the subject-about a longstanding scientific controversy over the cause of AIDS” (Thomas et al, 1994:1).

Two issues are raised here. The first is the fact that most of us know that HIV causes AIDS because we have been told so, by people with authority on the matter such as scientists and government officials. If they say HIV causes AIDS, then it must be true, after all, they should know. Secondly, the issue of media blackout on the existing controversy of HIV causation. For some unknown reason, the media is not interested in reporting the other side of the story. In this way, the “fact” that HIV causes AIDS has been drummed into our heads, and anyone who says otherwise must be insane.

The misconceptions surrounding the link between HIV and AIDS, have predominantly been a result of the mainstream literature stating certain issues as given facts. Currently, there are no existing structures to monitor what is said about AIDS and HIV, particularly where the general public is misled. Stine highlights this issue briefly when he says: “Much continues to be written about HIV/AIDS. Some of it, especially articles, has been less than accurate and has led to public confusion and fear. **HIV infection is not AIDS.** HIV infection is now referred to as HIV disease. AIDS is a syndrome of many diseases, each resulting from an opportunistic agent or cancer cell that multiplies in humans who are immunosuppressed” (Stine, 1996:27)

The classification and definition of AIDS is another source of controversy. The definition varies from time to time, and from region to region. Stine contends that “Each time the definition of AIDS has been altered by the CDC, it has led to an increases in the number of AIDS cases. In 1985, the change in the definition led to a 2% increase over what would have been diagnosed prior to the change. The 1987 change led to a 35% increase in new AIDS cases per year over that expected using the 1985 definition. The 1993 change resulted in a 52% increase in AIDS cases over that expected for 1993 (Stine, 1996: 27). Thomas and colleagues feel that the definition of AIDS is misleading because “AIDS is a syndrome defined by the presence of one or more of 30 independent diseases-when accompanied by a positive result on a test that detects antibodies to HIV. The same disease conditions are not defined as AIDS when the antibody test is negative. Tuberculosis with a positive antibody test is AIDS: tuberculosis with a negative test is just TB”

(Thomas et al, 1994:3). The list of the “AIDS diseases” however is not fixed, and the contents of it vary from region to region. Moreover it has been presented for instance that the AIDS people die of in Africa, is different from that which kills people in other parts of the world. According to the information given here, we know that AIDS is a condition classified by the presence of one of 30 diseases (now commonly referred to as AIDS diseases), as well as a positive test for antibodies.

The immediate questions that come to mind are, can a person have antibodies from the so-called “AIDS diseases” without necessarily having any association with AIDS? And, exactly what are these thirty diseases? Fiala shades some light in this area, by telling us that in 1986, the World Health Organisation published the following definition of AIDS that was exclusively applicable to developing countries:

AIDS Definition (1986)for adults in developing countries (3):	
Major signs: - weight loss - chronic diarrhoea 1 month - fever 1 month (intermittent or constant)	Minor signs: - cough for > 1 month - generalized itching - recurrent herpes zoster - oro-pharyngeal candidiasis - chronic progressive and disseminated herpes simplex infection - generalized lymphadenopathy
Exclusion criteria: - cancer - severe malnutrition - other recognised causes	
AIDS is defined by the existence of: - at least 2 major signs and - at least 1 minor sign and - in absence of any exclusion criteria or - in a patient with gereralized Kaposi’s sarcoma or - in a patient with cryptococcal meningitis	

(Source Fiala, 1998: 2)

From this definition, the diseases and conditions that are classified as “AIDS diseases” for developing countries are not new. People in Africa have, for instance suffered from chronic diarrhoea, persistent cough and severe malnutrition for years. If we use the above definition in Africa, we would certainly end up with the majority of people being classified either as HIV positive, or indeed suffering from AIDS. In Africa, countries further redefined the WHO definition to suit their own situations and resources. “...having tuberculosis in Uganda can quite officially lead to an AIDS diagnosis. As a result, statistics rise automatically” (Fiala 1998:3). This view is supported by many, among whom Derbyshire who points out that “Far from AIDS being hidden among tuberculosis and other illness, ...the clinical definition used to diagnose AIDS in Africa is an encouragement for established illness to be interpreted as AIDS. This helps to obscure the relation between poverty, disease, and early death and associates the cause of disease with the African prosperity for fecklessness and immorality” (Derbyshire, 1995; 311:633).

3.2 The spread of infection with HIV

The mainstream literature suggests that the origins of HIV are in Central Africa somewhere, where people were supposedly infected with the virus through ingestion of chimpanzee meat. This paper will however not address itself to that debate.

Since AIDS was first clinically diagnosed by the CDC in 1981, its transmission is reported to have remained predominantly among the original high risk group (homosexual and bisexual men, and injecting drug users) in North America, Western Europe and Australasia, although heterosexual transmission is said to be on the increase (Ford, 1994:85). As discussed earlier, in contrast to other places, the main mode of transmission in Africa is said to be heterosexual intercourse with an infected person, and the worst affected areas in the sub-Saharan region are East and Southern Africa. In Southern Africa, it is currently argued that “one out of four adults is infected with the virus” (Caron, 1999: 31). It is neither clear why the modes of transmission between Africa and the rest of the world differs so greatly, nor why the spread of HIV infection

in the US has remained predominantly among homosexuals and haemophiliacs, while in Africa the probability of infection between men and women is said to be equal.

While high levels of other STDs, especially those involving genital ulceration have been considered an important factor in the spread of AIDS in Africa. Others maintain that infection through contaminated blood transfusions and health related infections is a minor and declining source of infection, as blood screening and other health measures are expanded (Ford, 1994:85). For developing countries, many aspects of daily lives varying from poverty and civil strife, to cultural norms and practices are argued to contribute to the rapid spread of HIV infection. The World Bank maintains that "The HIV/AIDS epidemic in Africa is facilitated by the region's poor sexual and reproductive health, poverty, women's subordinate status, rapid urbanization, significant population movement, and conflict" (World Bank, 1999:5). Others insist that "Much of the rapid spread of HIV in the developing world can be attributed to high and rising rates of STDs, which are themselves spreading because of inadequate health services, which means most STDs remain untreated" (Panos, 1992:9).

3.3 The role of AZT in the prevention of HIV infection

AZT is an anti-retroviral drug that has been hailed as a miracle drug in the field of HIV and AIDS. In 1987, the American Food and Drug Administration (Farber, 1993:2) approved the use of AZT. AZT is indicated for "Treatment of HIV infection when CDC count is $< 500/\text{mm}^3$ or symptomatic. Also approved for use in HIV-infected pregnant women in 2nd and 3rd trimesters, along with IV ZDV during labour and delivery, and ZDV syrup to newborn for 6 weeks" (HIV Dent, 1999). Here, it is presented as a drug that slows down the breakdown of natural immunity to diseases, thus prolonging life for those who are infected with HIV. In August 1989, the New York times reported that "... the drug AZT can significantly delay the onset of AIDS (Acquired immune deficiency syndrome) in people infected with the AIDS virus who show mild symptoms of immune system damage. ...It had been previously shown to be effective in treating people with full blown AIDS" (New York Times, 1989:1).

There are those who disagree with the findings that support the use of AZT as prevention or treatment of either HIV or AIDS. Like the debate on the various aspects of HIV and AIDS, there is an on-going debate on the effectiveness of AZT in the prevention AIDS, and its role in prolonging life for those already suffering from AIDS. As early as 1993, the New York Times (ironically!) reported contradictory findings of the efficacy of AZT. In an article published in February 93, it reported that a study conducted in England, France and Ireland between October 1988 and October 1991 “did not find an evidence benefit in taking AZT early in the course of infection”. Furthermore, the said study (known as the Concorde study) found the survival rate was 92 percent among those who were treated immediately after diagnosis, and 93 percent among those who were given a placebo. The study found the rate of progression from infection to AIDS or death to be 18 percent in both groups involved” (Altman, 1993:1).

Much as researchers are not in agreement of the gains from AZT, the drug has been administered to both people infected with HIV to help them live longer, and to pregnant women, as a means to protect their unborn infants from infection with HIV through vertical transmission. Not only is AZT reported to protect unborn babies from HIV during pregnancy, but also it is argued that the risk of infection is substantially reduced if it is administered to infants after they are born (Channel 2000, 1999:1). The American Food and Drug Administration (FDA), a body responsible for protecting the public from risk, gave AZT approval, although it is reported to have been aware of the flaws in the trial of the drug. A growing number of scientists and researchers declare that records compiled during the trials of AZT were altered and watered down to give the drug a favourable outcome (Rayment & Hodgkinson, 1994; Farber, 1993:2, Deer, 1989), due to, amongst others, pressure from its manufacturer – Burroughs Wellcome. These researchers are not only concerned by the fact that the gains from AZT are limited (if any), but also the fact that the drug is reported to have strong negative side effects. The following are some statements made about AZT:

“The team concluded that AZT – a highly toxic and carcinogenic drug – neither prolongs life nor staves off symptoms of AIDS in people who are HIV-antibody positive but still healthy. ... The study found that AZT was too toxic for most people to tolerate, had no lasting effect on HIV blood levels, and left the patients with fewer CD4 cells than they had started with” (Farber, 1993:2).

“...the England journal of Medicine, comes after investigators paid more attention to the drug’s side-effects. These include anaemia, liver damage, fatigue, nausea, headaches and sometimes a collapse in white blood cells, making them more prone to disease” (Rayment and Hodgkinson, 1994:2)

“Serious side-effects include anaemia and a collapse in white blood cells that fight infections, making patients more prone to disease. ...A series of disturbing reports from Britain, America and Canada have shown that the damage is not always reversible, that the virus becomes even more virulent after treatment and that discontinuation of AZT can provoke other illnesses” (Deer, 1989:2)

It appears rather odd that despite all the negative publicity and very high costs of AZT treatment, the drug is used and passed off as a miracle drug to the developing world. AZT is reported to be extremely expensive, with costs varying from A\$10000 in Australia, \$ 8000 in America, and 4500 pounds in Britain, for a one-year full dose for one person (Deer, 1989:1). The above researchers are not alone in their plight against the “miracle” drug, the Panos Institute supports this view stating: “But AZT is toxic to bone marrow even at low doses, causing severe anaemia, with over a quarter of patients requiring blood transfusion. British researchers have found that, despite its benefits, it causes side effects ranging from nausea, loss of appetite and insomnia, to severe anaemia, lung complications and toxic interactions with other drugs. Reactions are severe enough to lead to death. They also found out that when they reduced AZT doses in order to prevent toxic reactions, the AIDS virus was activated, causing a patient to die” (Panos Dossier, 1988:21).

Chapter Four: AIDS and HIV in Botswana: The National Response

4.0 Introduction

Chapter four deals specifically with the Botswana national response to AIDS. This is in terms of the official AIDS policy and programmes that stem from it. A brief presentation on some of the non-government efforts is also presented here. However, this paper has not dealt with all of NGO, donor and private sector initiatives that exist in Botswana in the AIDS field, because of the limitations of doing a research paper for an MA programme (time, data, size of the paper).

4.1 National Policy on “HIV/AIDS”

In 1986, the government of Botswana set up the National AIDS Control Programme (NACP), and in turn the NACP developed an emergency one-year plan called the Short Term Plan (STP) in 1987. The STP aimed at increasing public awareness of HIV and training health workers in AIDS clinical management (Republic of Botswana, 1997:25). In addition, a minimum programme to screen blood and blood products and ensure the supply and use of disposable needles throughout the national Health Services was set up, under the Epidemiology Unit of the MoH (Republic of Botswana, 1997:25). This was followed by a broad based five year First Medium Term Plan (MTP I). The objective of this plan was the prevention and control of “HIV/AIDS” in Botswana, for the period 1989-1993. It was the MTP I that provided policy and strategic guidance for action from the beginning of the National AIDS Control Programme (Ministry of Health, 1993:1).

The Ministry of Health (MoH) called for a multi-sectoral national response to HIV and AIDS. All sectors and ministries, parastatal organisations, the private sector, and relevant non-governmental and community-based organisations were called upon to develop and implement their own programmes and activities in an effort to arrest the spread of HIV (National AIDS policy, 1993:4). The overall strategies of national policy on “HIV/AIDS” are based on the understanding that “HIV is mainly sexually transmitted”, thus “the prevention of sexual transmission is a key component of strategies for control” (Republic of Botswana, 1997:4). The strategies for the prevention of HIV infection seek to: prevent transmission of HIV/STD; reduce

personal and social impact of HIV/AIDS and STDs; reduce the socio-economic effects of HIV/AIDS and STDs; and promote participation of all units of society in meeting the above objectives.

The national policy that was developed to achieve the preceding objectives comprises of the following components:

- Information, Education and Communication, using different media and approaches, and aimed at different target groups, to form the basis for changes of social and sexual norms, values and behaviours which facilitate the spread of HIV in the population
- The promotion and efficient distribution of condoms to appropriate population subgroups
- The control of other sexually transmitted diseases through appropriate health-seeking behaviour by the population, and efficient diagnosis and treatment by health-care providers in the formal and traditional sectors.
- Counselling of Persons with HIV/AIDS and STD, and others, for the adoption of safer sexual behaviours and practices.
- The promotion of gender equality in all spheres of national and community life, to enhance women's social and economic status, and empower them for more effective participation in decision - making about safer sex.
- Encouraging men to use their authority and power in sexual and family relationships responsibly and positively to protect themselves, their partners and families from infection, through targeted education activities.
- The mobilisation of communities for their active involvement at all stages of HIV/AIDS prevention and care, particularly the problem-definition and intervention design states.

Source: Botswana National Policy on HIV/AIDS, 1997:4-5

The MTP I was a “purely health sector plan”, i.e. it mainly focussed on clinical diagnosis and prevention of the spread of HIV. This is argued to be one of its main limitations (Republic of Botswana, 1997:35). Taking this into account, the process of formulating the MTP II was intentionally different, in the sense that it was participatory. It involved all sectors of society in

order to come up with a more workable strategy to combat the spread of HIV. Seven target groups were identified: children, youth, women, men, the work place and management (public, private and NGO sectors).

“The focus of MTP II strategic plan is based on two main objectives: i) preventing the spread of HIV, and ii) mitigating the impact of HIV and AIDS at all levels of society. The MTP II strategic plan is therefore a summary of interventions and strategies identified by the multi-sectoral consultative planning for MTP II to form the national response HIV and AIDS in Botswana. ...The combinations of interventions and strategies in this strategic plan are aimed at providing an enabling environment for an expanded response to the epidemic. It will be created by focussing interventions and strategies on three main areas: (i) policy development, (ii) institutional strengthening, and (iii) service delivery” (Republic of Botswana, 1997:36).

4.2. National AIDS Programmes

4.2.1 National AIDS Control Programme

The National AIDS Control Programme (NACP) was set up in 1987, just two years after the diagnosis of the first Aids case in Botswana. The inception of NACP and the formulation of the plans to combat the AIDS problem were initiatives of WHO's Global Programme on AIDS (GPA). GPA also provided support for the implementation and running of the said plans (Republic of Botswana, 1997: Viii). The aims and objectives of NACP are the prevention of further HIV transmission and the reduction of “HIV/AIDS” impact at the individual, family and societal level. Thereafter, the national AIDS control plan was formulated for the period 1997 – 2000 by a coalition of sectors, including private organisations and non-governmental agencies (Republic of Botswana, 1997: 402-404).

Health workers in Botswana believe that the national response to HIV & AIDS has been timely, but are unsure of whether or not NACP exists in reality. It appears that NACP has never functioned as a programme, and it has reporting structures and a budgeting process of a typical government unit in Botswana. This means no autonomy exists within the unit and all decision

making takes place within the health ministry through the Director of Primary Health Care, reporting to the Permanent Secretary. According to Boemo Sekgoma, Health Officer at the AIDS and STD Unit, the NACP is charged with the national responsibility of fighting AIDS, but it has only two staff members. The upgrading of NACP to a department (thus giving it more autonomy) has only received approval from the Directorate of Public Service Management (DPSM) in March this year. (MoH 1, 1999: statement). While government documentation implies actual existence of the NACP, indications on the ground suggest otherwise.

4.2.2 National AIDS Council

In recognition of the fact that “HIV/AIDS” is not only a health, but also a developmental problem, the government embarked on an “expanded national response” to the epidemic. This entails a multi-sectoral approach to combating AIDS, involving all sectors. To achieve this multi-sectoral approach, and to enhance co-operation of the various sectors the government established the National AIDS Council (NAC). “The NAC is the highest nation body that advises government on all matters of policy in relational to HIV and AIDS” (Republic of Botswana, 1997:63).

The Council is composed of representatives from lead sectors across the economy, including representatives from the office of the president, the police and defence force, the BONASO, vice chancellor of the University, permanent secretaries in key ministries, the Christian Council and a representative of People Living with HIV and AIDS. The NAC is charged with the responsibility of co-ordinating, overseeing and monitoring the implementation of programmes and strategies of the NACP, and is chaired by the minister of health (Republic of Botswana, 1997:63-64).

Through this forum, various groups can air their issues of concern in relation to both AIDS and HIV, and or table their constituents at the national level. Such issues/motions can then be taken to parliament where necessary to alter national policy and legislation. An example of a successful venture that has been accomplished through this system was advocacy that forced the President to declare HIV and AIDS a national crisis. Less successful motions tabled thus far have been issues requiring the recognition and acknowledgement that homosexuality exists in

Botswana, thus allowing AIDS service organisations to provide condoms in prisons. So far, the government has refuted claims that sexual intercourse takes place in prisons, consequently overruled any efforts by NGOs to make condoms available in prisons (Mosidame, 1997:8). This is because prisoners are segregated by sex, to make condoms available in prisons would be to openly accept that homosexuality exists. There have been cases where prisoners have claimed to have contacted AIDS while in prison, but the government refutes such claims, arguing that such people contacted HIV before imprisonment. Prisoners are denied the freedom of sexual choice and are exposed to possible risk of infection, while the NAC waits for a detailed and concrete research into homosexual practices in prisons before taking any kind of action.

4.2.3 AIDS and STD Unit

In 1992, the MoH set up a unit that was tasked with the responsibility of co-ordinating the AIDS control programme (NACP). The formulation of this unit – AIDS/STD Unit (ASU) was a merger between NACP and STD, which were independent programmes. Although up until then the NACP was located in the epidemiology unit of the MoH, the ASU was created as a separate unit.

The functions of AIDS/STD unit (as it is commonly referred to), are broken down into four sub-units. These are counselling and home base care; Information Communication and Education (IEC); Surveillance (sentinel) and control of Sexually Transmitted Diseases (Republic of Botswana, 1997:26).

It is the ASU that carries out sentinel surveillance surveys, and, then releases the HIV and AIDS prevalence figures to the general public. ASU works in collaboration with the donors (UNAIDS, WHO, UNDP, UNICEF etc), the health facilities, and NGOs in the field of HIV and AIDS (Republic of Botswana, 1997:28). From 1996, the national strategy plan has received support from the UN organisations in the planning and implementation processes, in order to “minimise duplication and maximise the comparative advantage” of the different bodies. The co-ordination of such activities have been carried out by UNAIDS, while the cosponsors have been UNICEF, UNDP, UNFPA, UNESCO, WHO, and World Bank (Republic of Botswana, 1997:29).

There are mixed feelings regarding the functioning and success of ASU. Where as some would argue that indeed ASU has had commendable achievements in its work, others maintain that its work and area of focus is limited. The MTP II presents that: “The fusion of the two roles stretched the capacity of the NACP and AIDS/STD Unit as the epidemic matured, and the demands became more extensive and complex. Thus in the final analysis, the AIDS/STD Unit is unable to adequately perform the many roles with its limited capacity” (Republic of Botswana, 1997: 30).

4.3 Some NGO Efforts

4.3.0 Background

The NGO sector plays an important role in providing various services in the field of AIDS. These services include information discrimination, provision of counselling and testing services, assistance with caring for patients with AIDS as well as the provision of condoms as a means to protect oneself from infection, both as a free service and through social marketing. The financial burden of the services provided have in the past been mainly through donor funding, and partly through collaboration efforts between the NGOs in question, the government and the private sector. A short discussion of a few efforts in the AIDS service sector and some of the problems they face follows.

4.3.1 AIDS Action Trust (ACT)

AIDS Action Trust (ACT) was an NGO with resource centre for information of AIDS and STD to the general public, with the aim to make AIDS and HIV information freely available to enable people to protect themselves against infection with HIV. Furthermore, ACT conducted AIDS related research, and carried out peer education programmes in collaboration with other NGOs in the field of AIDS and STDs. ACT was an initiative born out of the concern that due to lack of information. The youth particularly, were rapidly becoming infected and in turn infecting each other out of ignorance. The Centre came into being in 1992, and was financed by Hivos. However in 1998, the trust was forced to close down due to the withdrawal of donor funding and

government's reluctance to finance its existence. Since then, the local network of AIDS service organisations has stepped to declare the closure of ACT unconstitutional and has embarked on new fundraising activities to bring the trust back to its feet.

4.3.2 Young Women Christian Association (YWCA)

YWCA has a programme on Peer Approach to Counselling and Training (PACT) which came into effect in 1990, and a Teen Mother Programme that was born in 1988. The PACT programme was designed to empower Batswana Youth (male and female) with knowledge and skills that are aimed at enhancing self-esteem to build a positive well-rounded responsible individual. Components of this project include team building, common skill identification, value identification, facts and myths about human sexuality and relationships as well as HIV and AIDS. The Teen Mother Project serves as a day care centre for the kids of Teen Mothers to enable them to continue attending school and further their education.

4.3.3 Population Services International

Population Services International (PSI) is an American non-governmental organisation that operates in over 50 countries world wide, with its headquarters in Washington. PSI Botswana launched its first product, Lovers Plus condoms in June 1993. At this time the programme's operating costs were funded under the then USAID bilateral mission to Botswana, while the costs of the condoms were paid for by the Government of Botswana.

At present, condom social marketing is the main function of PSI Botswana. The broad concept of social marketing is the provision of much needed health products to the majority of people that require the products. Social marketing utilises well known business concepts and techniques employed by regular marketing experts, to distribute health care products for public health purposes. The resulting effect is the use of sound business principles to achieve a well-defined public health objective. The said products are distributed at a price affordable to the users (usually low and middle income), yet high enough for the user to view him/herself as a consumer of a valuable product. The government of Botswana is the only local government that funds it's

own social marketing activities in the developing world. GoB has not only supported PSI Botswana (in terms of supplying the condoms distributed by PSI) from the beginning, but also has for the last two years fully funded all its operational costs previously funded by USAID, save for salaries in the last year.

As early as 1993 PSI was one of the founding members of the Botswana Network of AIDS Service Organisation, and PSI continues to work closely with local groups such as AIDS Action Trust and Botswana Council of Women (BCW). Such collaboration entails the use of knowledge of the local environment to offer and support training and creation of public awareness on issues related to AIDS. In addition to education and training, celebrating annual events have played an important role. Examples of such events include BOFWA day – having joint public events to commemorate a family day; world AIDS day and the PSI Botswana National Condom Week that takes place in July every year. The Government's supports for such activities include but are not limited to participation at senior governmental level. In the past, these have included a minister, permanent secretary or mayor officially opening and attending the said events.

PSI Botswana strongly believes that talking about AIDS and HIV is an important factor towards behaviour change. However, because the focus is on the youth, discussions about AIDS, and information dissemination is done in a manner that is attractive to that target population. Some of the communication channels employed by PSI include the use of local role models to highlight the overall importance of correct and consistent use of condoms; sponsoring music concerts whose integral part is AIDS education; and AIDS messages on bill boards, banners, adverts and radio jingles. Peer Education at concerts, in schools and in public places also play a vital role in the information dissemination process. This is done along with the distribution of pamphlets and printed materials about AIDS; cross promotion of condoms with other goods such as beverages; and counselling by a professional social worker at the Youth Centre in Gaborone. At times the organisation calls on people living with HIV to provide counselling from that perspective. In addition, PSI Botswana hosts live weekly radio shows that addresses issues relating to AIDS, HIV, safe sex, condom use etc; comprising of a short presentation/introduction of the topic, music breaks and an interactive session of questions and answers with the listeners.

4.4. Networking - BONASO

Botswana Network of AIDS Service Organisations (BONASO) is an umbrella organisation for all the NGOs that work in the AIDS field. Its main objective is to co-ordinate and encourage networking among the NGOs, thus minimising overlapping and increasing efficiency. BONASO also serves as a forum at which ideas are exchanged and problems addressed. Additionally, BONASO is affiliated to a regional body the Southern African Network of AIDS Service Organisations (SANASO), that discusses issues of regional priority. The body can then use political influence or pressure from some countries to influence policy making in other member states.

4.5 The AIDS Epidemic in Botswana as Reported

4.5.0 Introduction

The ministry of health has the primary responsibility for the monitoring tools for the spread of HIV in the country, and this responsibility is entrusted onto the AIDS/STD unit. The medical practitioners in health facilities do AIDS and HIV diagnosis (symptoms and signs), then report these cases to the AIDS/STD Unit. The sentinel surveillance survey takes place in fourteen sentinel sites, but they are carried out annually only in Gaborone and Francistown. The other sites are monitored every other year on an alternate basis. ASU is also responsible for the monitoring trends in youth sexual behaviour. This is done on a contractual basis. So far, ASU has hired a Namibian-based private research firm – SIAPAC-Africa to carry out research regarding issues of AIDS and HIV knowledge, attitude and practice, and preventive measures for this purpose.

4.5.1 Prevalence of HIV in Expectant Women

4.5.1(a) HIV Prevalence in Gaborone

The HIV Seroprevalence rate in Gaborone is reported to shows an upward trend. According to the statistics presented by the sentinel surveillance surveys six and seven, the infection with HIV

among pregnant women is highest in age groups 15 – 39 years. However, the difference between the most and least affected age groups is minimal. In Gaborone, the most affected group was 20-24 years with a Seroprevalence rate of 41.3% in 1996, and the least affected was 40 – 44 years with 19.0% for the same year. In 1997, the HIV prevalence in these age groups had risen to 42.3% and 24% respectively. In 1997 however, while ages 40-44years remained as the least affected, age 25-29years was the most affected group, with 45.48% prevalence rate. This is likely to be as a result of some of the women in age group 20-24 graduating to age 25-29 because they were a year older (See table 3).

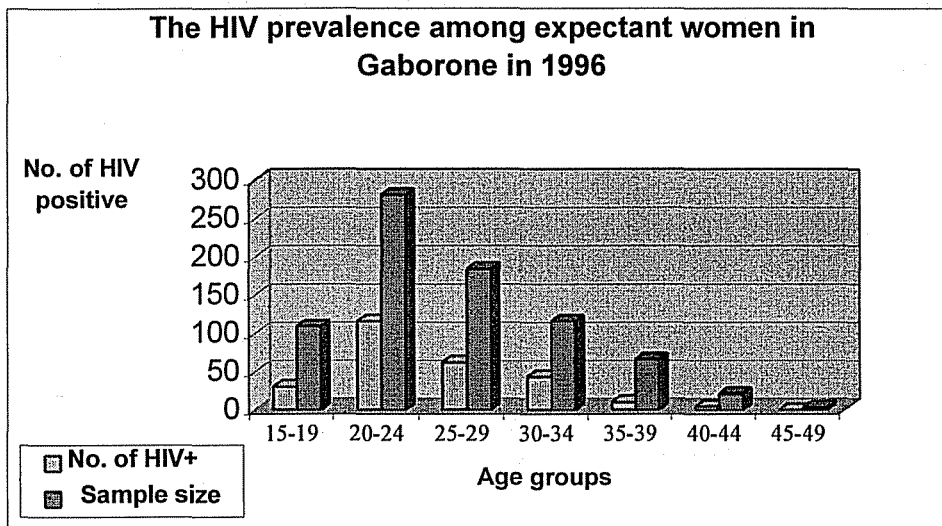
Table 3: Age specific HIV prevalence rates among pregnant women in Gaborone in 1996

Age Group	HIV Prevalence	No. of HIV Positive	Sample size
15-19	27.5%	30	109
20-24	41.3%	116	281
25-29	33.7%	62	184
30-34	37.1%	43	116
35-39	15.2%	10	66
40-44	19.0%	4	21
45-49	0.0%	0	3

Source: Sixth Sentinel Survey, pp8

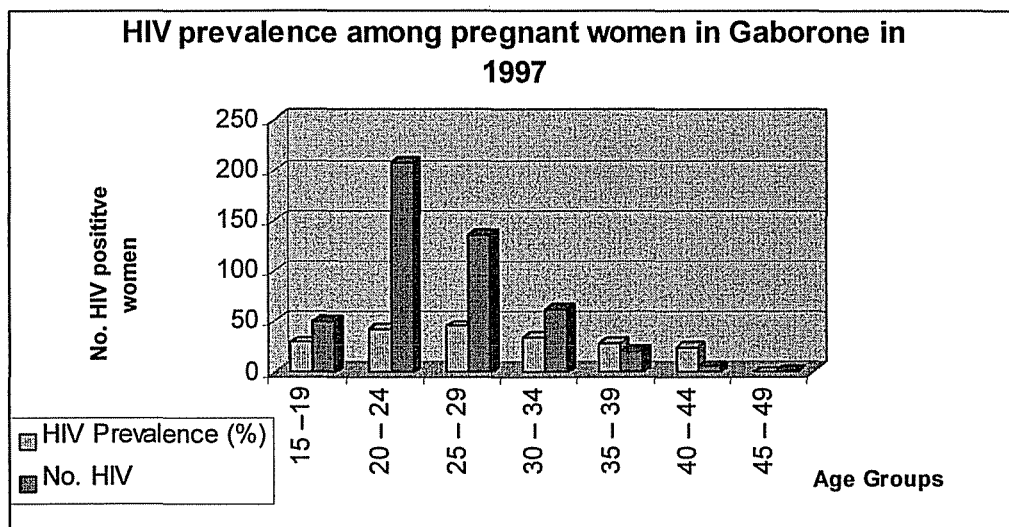
The graph below (figure 1) indicates that for age groups 15 – 34, a substantial portion of the women who participated in the survey were reported to have tested positive for HIV in Gaborone for 1996. This graph also shows that the most severely affected age group is 20-24 years, the age at which a high number of women have children in Botswana (UNICEF and GoB, 1993: 40-41), while the least affected group is that of ages 45-49, which is demographically assumed to be the end of reproductive years.

Figure 1: HIV prevalence among pregnant women in Gaborone



In 1997, the HIV prevalence picture among pregnant women for Gaborone was not too different. The figure below indicates that HIV infection rates are not only high, but also increasing steadily. More and more women are reportedly testing positive for HIV, despite efforts to curb infection rates.

Figure 2: HIV prevalence rates in Gaborone in 1997



In 1997, where a year before 41.3% of those aged 20-24years was reported to be HIV positive, this figure rose to 42.27%. For those aged 25-29years, the figure rose from 33.7% in 1996, to 45.48% in the following year. The prevalence rates are reported to have risen in all age groups except that of 45-49 years that appears to have remained at zero infection rates (see table 3).

Table 4: HIV prevalence rates among pregnant women in Gaborone in 1997

Age Group	HIV Prevalence (%)	No. HIV Positive	Sample Size
15 –19	29.65	51	172
20 – 24	42.27	208	492
25 – 29	45.48	136	299
30 – 34	34.42	63	183
35 – 39	28.57	20	70
40 – 44	24	6	25
45 – 49	00.00	1	1

Source: Seventh sentinel survey, 1998:7

4.5.1(b) HIV Prevalence in Francistown

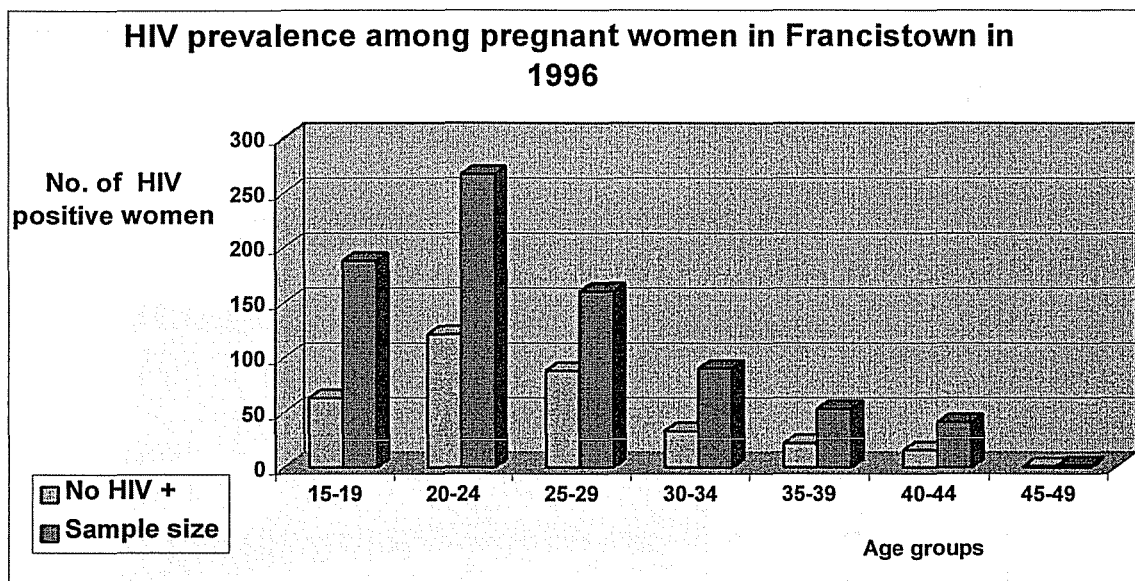
In Francistown, the prevalence rates among pregnant women are reported as noticeably higher than that of Gaborone. The most affected age groups are reported to be 20 – 24 and 25-29 at 45.3% and 55.0% in 1996 respectively. Of the 2 women age 45 – 49 who participated in the survey, one tested positive for HIV infection (see table 4).

Table 5: Age specific prevalence of HIV in expectant women in Francistown in 1996

Age group	HIV prevalence	No HIV +	Sample size
15-19	33.5%	63	188
20-24	45.3%	121	267
25-29	55.0%	88	160
30-34	36.7%	33	90
35-39	41.5%	22	53
40-44	39.0%	16	41
45-49	50.0%	1	2

Source: 6th sentinel survey, 1997:8

Figure 3: Age specific HIV prevalence rates for pregnant women in Francistown



However in 1997, the rates seemed to have increased at a decreasing rate, with ages 25-29 falling to 50%, while for age group 20-24 years, the rate increased to 47.24%. The rates in Francistown are argued to be high as a result of its location – about 200km from Zimbabwe, with high population mobility between the two countries. It is also argued that the majority of the people

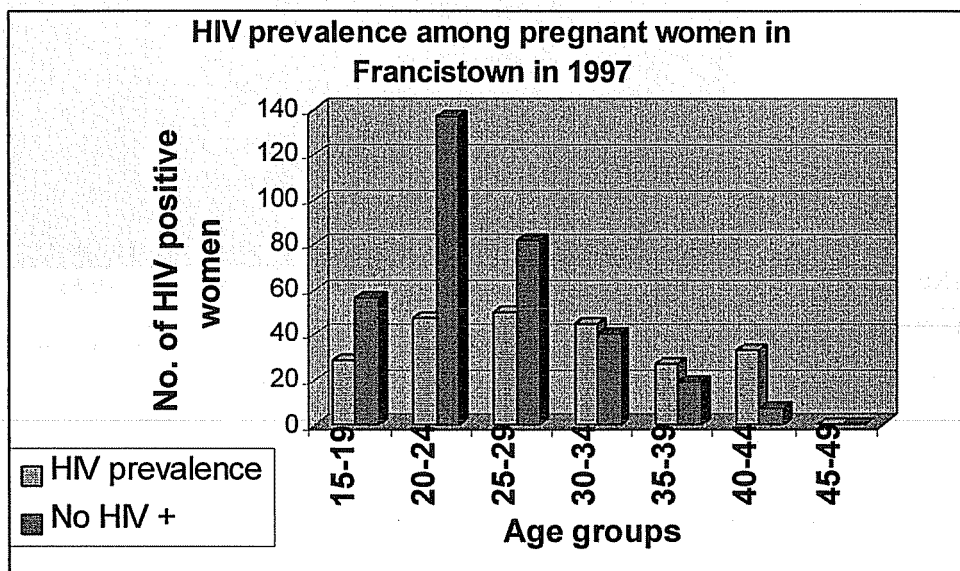
who cross the boarder are not only from Zimbabwe and Zambia, but also mainly women who are supposedly exploited sexually by police at the boarder because they cross the boarder illegally, hence putting themselves at a disadvantage (Webb, 1997:19).

Table 6: Age specific prevalence of HIV in expectant women in Francistown in 1997

Age group	HIV prevalence (C.I)	No HIV +	Sample size
15-19	28.60	56	153
20-24	47.24	137	290
25-29	50.00	82	164
30-34	44.44	40	90
35-39	27.14	19	70
40-44	33.33	7	21
45-49	00.00	0	4

Source: Seventh sentinel survey, 1998:6

Figure 4: HIV prevalence among pregnant women in Francistown (1997)



4.5.2 Reported Trends in HIV Infection in Botswana

4.5.2 (a) Trends in HIV Prevalence in Pregnant Women in Botswana

Trends in HIV Seroprevalence have been closely followed for Gaborone and Francistown. The data gathered and reported (see table 7) indicate that the rate of HIV infection in pregnant women for the two cities from as far back as 1992 is increasing. The current difference in prevalence rates between the two sites is said to be minimal and narrowing, although Francistown has higher rates.

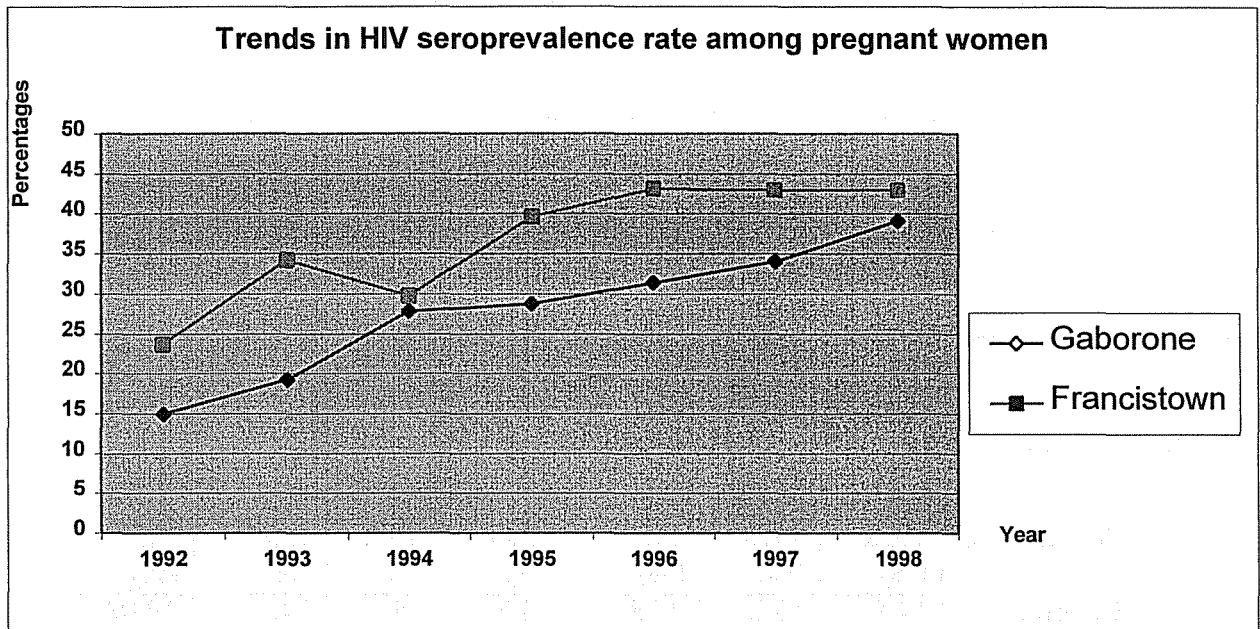
Table 7: Trends in the prevalence of HIV in Gaborone and Francistown

Sentinel site	1992 (%)	1993 (%)	1994 (%)	1995 (%)	1996 (%)	1997 (%)	1998 (%)
Gaborone	14.9	19.2	27.8	28.7	31.4	34.0	39.08
Francistown	23.7	34.2	29.7	39.6	43.1	42.9	42.96

Source: Seventh sentinel survey, 1998:9

In 1992, the reported prevalence rates were 14.9% and 23.7% in Gaborone and Francistown respectively. By 1998, these rates rose to 39.08% for Gaborone, and 42.96% for Francistown. These constitute increases in prevalence rates 24.18% and 19.26% respectively, which is considerably high. Prior to 1992, prevalence rates and trends cannot be traced because the sentinel surveillance had not yet begun, and there were no structures in place to monitor the spread of HIV infection in the country.

Figure 5: HIV Trends in Gaborone and Francistown



4.5.2(b) Trends in HIV Prevalence Among Men With Other STDs

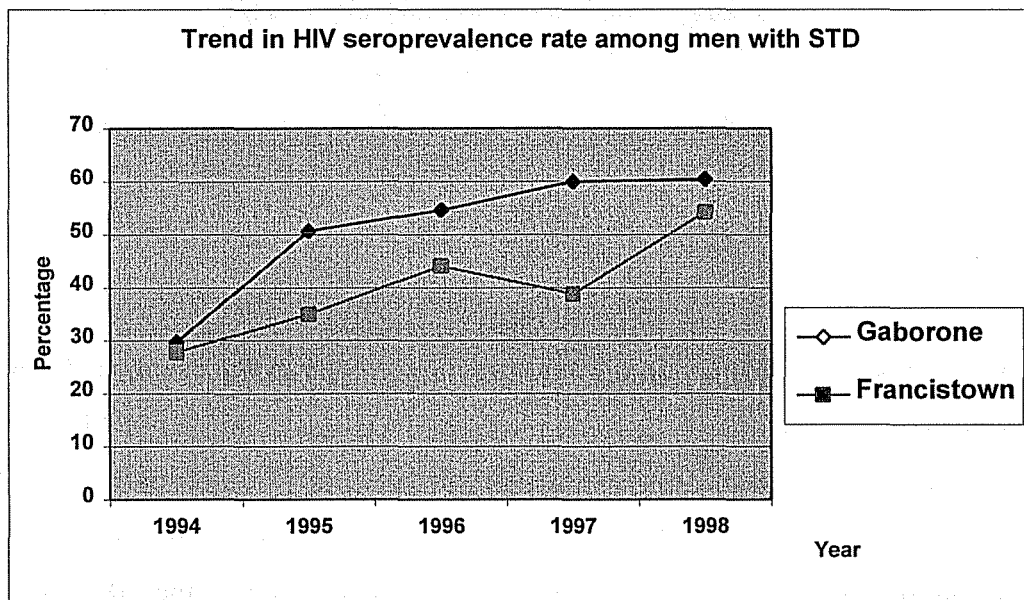
In Botswana, there have been studies that are argued to have established that infection with an STD puts one at higher risk of infection with HIV (Republic of Botswana, 1997:11). The sixth sentinel survey maintains that: “STDs are common in Botswana and may be one of the contributing factors for the rapid spread of HIV in the country” (AIDS/STD UNIT, 1997:10). The HIV prevalence among men suffering from another STDs presents a picture that is not so different from that of pregnant women for both 1996 and 1997. Once again, the highest prevalence rates among men with STDs are also reported to have occurred in Francistown, where 60% of the men who sought help for STDs at a health facility tested positive for HIV infection in 1997. In Gaborone on the other hand, the figure was 39.81% for the same year. (AIDS/STD UNIT, 1997:10-11). Here too, the gap between the two cities in seroprevalence rates is said to be narrowing rapidly. The prevalence rates among men with other sexually transmitted diseases have risen from 27.8% to 54.18% in Gaborone, and from 29.7% to 60% in Francistown, between 1994 and 1998 (see table 8).

Table 8: HIV prevalence rates (%) in men with other STDs in Francis town

Site	1994	1995	1996	1997	1998
Francistown	29.7	50.7	54.6	60	60.37
Gaborone	27.8	34.9	44.1	38.8	54.18

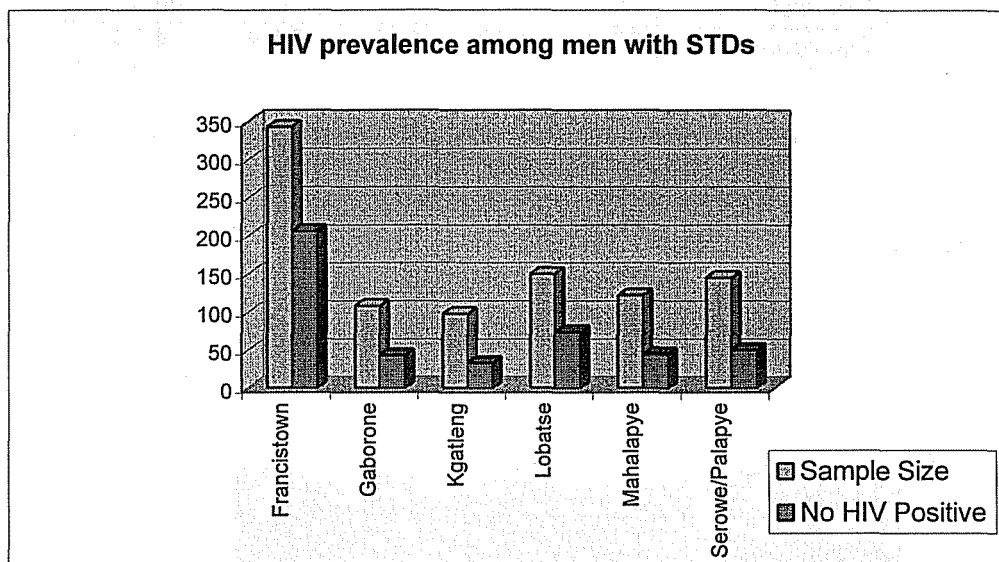
Source: Six and Seventh sentinel surveys, 1997: 11 and 1998:10 respectively

Figure 6: HIV trends in men with STDs in Gaborone and Francistown



Looking at the reported spread of HIV infection in Gaborone and Francistown by age, it appears that the most affected age groups are those of 20-24, and 25-29, both in terms of seroprevalence rates among pregnant women as well as men suffering from STDs in 1996-97. According to the seventh sentinel survey, similar trends were recorded by the previous surveys, that of 1995.

Figure 7: HIV prevalence rates in 1997 for selected sites in the country.



In 1997 the sentinel surveillance was carried out in a number of sites (see table 9) in relation to men suffering from other sexually transmitted diseases. The results as reported indicate that HIV prevalence rates are relatively high. Although Gaborone and Francistown have always had higher rates than anywhere else in the country, for the year. Lobatse, a town located about 60 km south of Gaborone had a prevalence rate of 49.33%, which is higher than that of Gaborone at 39.81%. What is important to note is the fact that for all the nine sites, the reported prevalence rates are all above 30%. Using these figures, one may be compelled to conclude that on average, more than three out of ten men who are infected with an STD in Botswana are likely to test HIV positive.

Table 9: HIV seroprevalence among men with other sexually transmitted diseases

Sentinel site	Sample Size	No HIV Positive	Prevalence (%)	95% C.I
Francistown	343	206	60.05	54.66- 65.28
Gaborone	108	43	39.81	30.51 - 49.68
Kgatlang	98	33	33.67	24.43 - 43.92
Lobatse	150	74	49.33	41.08 - 57.61
Mahalapye	122	45	36.88	28.33 - 46.09
Serowe/Palapye	145	50	34.48	26.79 - 42.82

4.6 Conclusion

This chapter presents the Botswana national framework and approach to HIV and AIDS. This is in terms of the national policy on “HIV/AIDS” and the programmes that have been born out of this policy to deal with both HIV and AIDS. It highlights the focus of the government’s efforts and vision in dealing with the spread of HIV.

Official literature argues that the response to the AIDS epidemic in Botswana has been timely. The data presented in this chapter may lead one to conclude that the spread of HIV in Botswana is on the increase. Furthermore, it is reported that in 1997, “Out of a total of 4194 pregnant women tested, 1614 (33.5%), were found to be HIV seropositive” (AIDS/STD UNIT, 1998:6). These statistics have the same effect as the statistics thrown around about AIDS in Africa by the media. One’s first reaction is that of fear, because Botswana’s population is relatively small (1.5 million), and if four out of ten people have AIDS, then surely the end is near. A closer examination of the statistics and figures highlights the fact that the figures are extrapolated from the sentinel surveillance survey, whole focus is pregnant women, men who have been treated from STDs and limited records of clinically diagnosed cases of AIDS. The extrapolations are made under some assumptions that are made about the population of the country as a whole. Granted that the said assumptions are made with some statistical degree of confidence, the opposite could be true, i.e. the assumptions could indeed be wrong.

A lot is riding on two main assumptions that indeed HIV causes AIDS, and that HIV in Botswana is primarily spread sexually. If, by some remote chance these assumptions are wrong, then all the efforts in curbing the spread of AIDS are misplaced, and a lot of money that could have been spent on other aspects of health provisioning such as primary health care, eradication of TB and efficient treatment and prevention of other STD would have been wasted. A lot has been done to create awareness of AIDS and its aspect of sexual transmission. Huge billboards in major cities and towns in the country carrying the message: "the ABC of AIDS: Abstain, be faithful, condomise". The researcher does not argue that people should not adhere to such messages. On the contrary, correct and consistent use of condoms would, indeed, prevent unwanted pregnancies, reduce teenage pregnancy and protect people from infection with sexually transmitted diseases and infections. At the same time, responsible sexual behaviour would also result in the release of funds currently used to treat STDs for other uses such as safe motherhood and delivery.

Bureaucracy and the bureaucratic processes that are often inherent of public service sector came out very strongly in this case. Plans are underway to create of a new body, the Parliamentary AIDS Committee (Ministry of health, 1999:1), while the NGOs in the AIDS sector continuously face budgetary problems due to donor de-funding, (some were actually closed down) because they are unable to secure funding. The public services are inefficient mainly due to insufficient skilled manpower (Ministry of Finance And Development Planning, 1997:404). The fact that Botswana has one of the best economies in Sub-Saharan Africa has led to an exodus of donors from the country, consequently the hand-over of the financing responsibility of NGOs to the government. Since donors have been the main direct financiers of charity projects and NGO groups in the AIDS field, their departure has significantly lead to a reduction in services provided by NGOs and the AIDS service sector is no exception.

Chapter Five: Conclusions and Recommendations

5.1 Conclusions

The various debates regarding both AIDS and HIV that are ongoing at the international level have remained largely at that level. Unfortunately, these debates have involved the developed world carrying out research in the AIDS field, then releasing their findings to the world as a whole, while the developing world either is a passive recipient of such information or has been kept in the dark altogether. Consequently, such debates have largely moved in the same lines as other issues pertaining to development, international trade, population growth, consumption patterns and the long-term sustainability of the environment. The direction of research and international debates is predominantly due to the fact that much of the developing world is still struggling with issues such as provision of basic needs, food security, and either a growing debt to monetary institutions such as the World bank or IMF or growing balance of payment deficits. This predicament translates into lack of resources for primary research about AIDS, let alone to achieve a meaningful influence in this field at the international level. The result is the acceptance of the research findings and all forms of prescribed policies and programmes.

Far more has to be established in terms of the causes of AIDS. The grey areas include, but are not limited to: the existence of AIDS without prior infection with HIV and HIV cases that have not progressed to full blown AIDS; the variation of risk groups by region although the infection rate between men and women in Africa is said to be almost equal; the rapid spread of HIV infection in certain places while the opposite is true elsewhere etc. The bottom line is, in order to justify spending large sums of money on AIDS prevention, we should be clear of what causes AIDS. Treating conditions in the absence of knowledge of the cause of the conditions would result in a lot of problems, among which the misallocation of public funds. For example, it has been reported that in America, "... a person who doesn't qualify for Medicare on Medicaid but can show that he is too poor to afford AZT or DDI can receive them for free... Someone in the same economic position suffering from cancer or heart diseases will not have access to drugs that could save his life"(Fumento, 1992:31). The availability of funds for "AIDS diseases" may serve as an incentive to declare a person HIV positive in order to give him/her access to treatment.

In so far as Africa is concerned, the issues raised in relation to AIDS lie in the argument that promiscuity or “risky” sexual behaviour, deeply rooted in African culture, is to blame for the rapid spread of AIDS. Claims that unless Africans confront their questionable sexual behaviour, we are told, the AIDS pandemic will continue to claim millions of lives in the continent every year, are themselves increasingly questionable. On the contrary, “STDs are widespread in many developing countries because individuals cannot afford treatment, and health authorities cannot afford to provide the comprehensive network of clinics and medical staff that would ensure disease prevention and care ” (Panos, 1992:11).

Upon closer examination, it appears that people in Africa do not die of AIDS as we are led to believe (for AIDS in fact does not kill); they die of diseases and conditions that for the most part are not new. These include severe malnutrition, tuberculosis, diarrhoea, cholera etc, conditions and diseases that have been labelled as “AIDS diseases” or “opportunistic infections”. However, AIDS is said to be behind depletion of the labour force, and increasing vulnerability to poverty in Africa. In the same way that population growth has been blamed for most of the world’s problems today (poverty, malnutrition, environmental damage, depletion both natural resources and the ozone layer etc), AIDS is now blamed for the existence of, and increasing levels of poverty in Africa. For as long as researchers in the AIDS field convince the majority of the people that indeed AIDS is the culprit behind developing countries’ economic problems, the world is induced to brush aside crucial issues relating to unsustainable consumption patterns in developed countries.

Drawing from the analysis done in this paper, the current measure and efforts to reduce the spread of AIDS in Botswana do not seem to have had a great impact, but have to a certain extent obscured the approach to the treatment of tuberculosis and sexually transmitted diseases. Botswana’s healthy economic condition has not trickled down to the grass roots level. Although AIDS was first diagnosed in Botswana in 1985, and the first AIDS plans were established in 1987, the analysis of the national response to AIDS indicate that not much has happened in real terms. Whereas the prevalence of TB had been brought under control and dropped to less than 40 percent in pre-AIDS times, the last decade has witnessed a very rapid resurgence (Chaba: 1997:100). Additionally, there are reportedly higher rates of infection with sexually transmitted

diseases now than before, despite efforts to educate the public about protecting oneself not only from STDs but also AIDS. The operational focus has been on the promotion and provision of condom use. A number of bureaucratic bodies have been born out of the concern for the rapid spread of AIDS, but on the ground, these have been translated into only two people being responsible for the national programme on AIDS. If AIDS were primarily sexually transmitted in Botswana, and the existing statistics quoted in the media were indeed accurate, then four out of ten adults in Botswana are either HIV positive or have AIDS. If this is so, in a population of about 1.4 million people, then not only should the Botswana population have been well on its way to extinction, but also an intensive and comprehensive AIDS programme should have been on the ground by now.

Botswana, unlike other Africa countries, does not suffer from huge external debts or structural adjustment programmes that deplete the annual national budget. Instead, Botswana has had a substantial amount of foreign reserves in the early 1990s, and these were reported to be sufficient to cover approximately thirty months of imports of goods and non-factor services. In terms of SDRs (Special Drawing Rights) foreign exchange reserves grew at an average annual rate of 6.0%, from SDR 2 599 million in December 1991 to SDR 3 458 million in November, 1996 (Republic of Botswana, 1997:59). Botswana's health problems may not be a result of lack of funds, but perhaps misplaced programmes.

The figures and statistics on which the programmes are based are collected from mainly two groups: pregnant women who attend ante-natal care, and men who are treated for STDs. At the same time, the policy document stems from the assumption that "AIDS is primarily sexually transmitted". The conclusions made, though based on a certain degree of statistical confidence, these do not tell us beyond reasonable doubt the extent to which AIDS is spreading in the country and could be misled. The efforts to make condoms freely available and accessible are, needless to say, crucial to the reduction of STDs and improvement of sexual and reproductive health. However, these efforts are not sufficient to deal with infection with HIV, let alone with the spread of the so-called "AIDS diseases".

In general, the policies and programmes that have been implemented and are still being implemented do not reflect a new view of AIDS as a development problem. Although, much of the literature begins by declaring that "AIDS is more than a health problem" (UNAIDS, 1998:4, World Bank, 1999:1, Republic of Botswana, 1993:4), this has not proven to be more than a catchy slogan in official documents. The World Bank contends that "strategies to reduce poverty in Africa should focus on HIV/AIDS and sexual and reproductive health". These, the Bank insists, should be in terms of: scaling up effective HIV prevention interventions; ensuring basic reproductive health services, investing in research on female-controlled disease and pregnancy prevention methods, ensuring sexual and reproductive health of young people through culturally appropriate venues; ensure that sexual and reproductive health services, including prevention of HIV, are integral to health sector reform; and reducing mother-to-child transmission of HIV through counselling, testing and short-course antiretroviral therapy" (World Bank, 1999:2). It is not immediately clear firstly how the intensification family planning efforts in Africa can result in the control of HIV infection, and secondly, how such efforts can be argued to regard AIDS as a development problem.

Economic issues pertaining to poverty, the international terms of trade, structural adjustment programmes and their role in health provisioning in developing world, resource, income and consumption distribution, to name but a few, need to be brought on the forefront. The benefits of such a developmental approach to AIDS should include the eradication of opportunistic diseases and infections (e.g. Tuberculosis, malaria, cholera etc), that are in fact, not new. This requires a confrontation with various aspects of the world's economic and political system that continuously put developing countries at a disadvantage, thus re-enforcing their deteriorating health status.

5.2 Policy Recommendations

5.2.1 Health Research and Development

It is time for developing countries to carry out own primary research in relation to local problems and priorities, and formulate policies and programmes that cater for specific local needs. African countries need to take stock of their AIDS situations, and come up with their own analysis of their individual situations before accepting prescribed programmes from elsewhere. Many of the programmes that have come about as a result of donor participation in policy formulation in various fields in Africa have not been particularly successful in attaining sustainable long-term goals. National governments have followed the advice given by IMF and World Bank in an attempt to reduce balance of payments deficits and poverty levels, and these have been counter productive.

Programmes geared towards the eradication of AIDS (if that is the final conclusion) should not focus on sexual and reproductive health, since socio-economic factors are the underlying determinants/causes of rapid spread of the so called AIDS diseases. The recognition that AIDS is a development problem entails putting in place measures that are backed up by developmental policies and programmes to address the budget allocations to various health problems, access to comprehensive primary health care (especially safe pregnancy and delivery), income and resource distribution both internationally and nationally. Condom social marketing and provisioning should be a part of a comprehensive programme geared towards the eradication of sexually transmitted diseases and safer sexual behaviour, not the main focus of an "AIDS programme".

5.2.2 Health Policies and Programmes

Developing countries should respond to local needs when formulating health policies and programmes. The policy process must begin by asking the basic question, "what are people really dying of?" The answer to this question must be the guiding principle behind health policies, thus shaping and influencing the direction of national health programmes. This, then,

presents an age-old dilemma: how to develop health programmes with a local agenda, with the existing reliance on outside donor funding. The challenge lies in persuading donor countries to come on-board to assist developing countries in addressing pressing health issues without the imposition of donor priorities.

5.2.3 AIDS and Health Programmes

In addition to the above recommendations, Botswana needs to review the national policy on AIDS. The references of “HIV/AIDS” as one and the same, and AIDS as a disease contribute to the myths and misunderstandings surrounding both AIDS and HIV. Official documents should not only recognise the two as separate conditions, but also provide correct information to the public at large.

The stigma attached to AIDS embedded in the “African risky sexual behaviour” has been strongly incorporated into the Botswana AIDS policies and programmes. “AIDS” must be separated from STDs, both in placement within the “AIDS/STD” Unit of the ministry of health, and in public health service systems, to remove the stigma attached to AIDS in relation to sexual misconduct. This association of AIDS with sexual promiscuity contributes to the shame associated to AIDS, consequently the reluctance to seek help when one has diseases such as tuberculosis and or wasting. Botswana should focus on the treatment and eradication both tuberculosis and STDs without associating them with AIDS. This entails treating patients of what they are suffering from (TB, STDs) first and foremost, without assuming that these may be a manifestation of AIDS.

References

- Agadzi, V. K. (1989) AIDS. The African Perspective of the Killer Disease. Accra: Ghana University Press
- Anabwani, G. (1997) Mother to Infant transmission of HIV. In Ministry of Health, *National Conference on HIV/AIDS in Botswana August 6-9, 1997. CONFERENCE REPORT*. Gaborone. (56-59)
- AIDS/STD Unit, (1997) Sixth Sentinel Surveillance in Botswana, Ministry of Health
- AIDS/STD Unit, (1998) Seventh Sentinel Surveillance in Botswana, Ministry of Health
- Altman, L.K.(1993) "New Study Question Use of AZT in Early Treatment of AIDS Virus" in New York Times, (4/2/93) P.A1 <http://www.aegis.com/news/ads/1993/AD930603.html>
- Bandarage, A. (1999) "Population and development: Towards a social justice agenda". In J. Silliman and Y. King (Eds) *Dangerous Intersections: Feminist Perspectives on Population, Environment and Development*. Cambridge, MA: South End Press, (pp33)
- Bender, D and Bruno Leone (Series Eds), Michael D. Biskup & Karin L. Swisher (Book Ed) *AIDS OPPOSING VIEW POINTS*. San Diego: Greenhaven Press, Inc (Pp31)
- Botswana Daily News (1999) "AZT Will not Jeopardise the health of the mother" (30/3/1999)
- Caron, M. (1999) "The Politics of Life and Death. Global Responses to HIV and AIDS". In *World Watch* May/June 1999
- Centres for Disease Control (1999a) CAUSE OF AIDS. Internet site:
http://www.cdc.gov/nchstp/hiv_aids/hivinfo/vfax/260010htm (17/7/99) (Pp1)
- Centres for Disease Control (1999b) HIV TRANSMISSION. Internet site:
http://www.cdc.gov/nchstp/hiv_aids/hivinfo/hivinfo/vfax/260020htm (Pp1)
- Chaba, S. (1997) "Integration of tuberculosis Management into Community Home Based Care in Botswana" In Ministry of Health, *National Conference on HIV/AIDS in Botswana August 6-9, 1997. CONFERENCE REPORT*. Gaborone. (Pp 100-112)
- Channel 2000 (1999) AZT Aids AIDS Babies. Appears to Protect Infants From Catching Virus. BOSTON, Posted 4:30p.m. November 11, 1998.
<http://www.cbc2.com/news/health/stories/news-health-981111-182607.html>
(13/9/99)
- Crook, N. (1997) Principles of population and Development. With Illustrations from Asia and

Africa. Timaeus, I. M. (Ed) Oxford University Press (pp 3-80,)

- Dawson, M. H. (1988) "AIDS in Africa: Historical roots". In Norman Miller and Richard C. Rockwell (eds) *AIDS in Africa. The Social and Policy impact*. Lewiston/Queenston: The Edwin Mellen Press. (Pp 57-66)
- Deer, B (1989) "REVEALED: FATAL FLAWS OF DRUG THAT GAVE HOPE" *In Sunday Times*, London. <http://www.virusmyth.com/aids/data/bdflaws.html> (27/9/99)
- Derbyshire, (1995) "AIDS is less of a health threat than other diseases in Africa" *In British Medical Journal*, 1995;311:633.
- Farber, C. (1993) AZT IS DEATH. AIDS; Words from the Front. Internet site: <http://www.virusmyth.com/aids/data/cfberlin.html> (18/10/99)
- Fiala, C (1998) AIDS IN AFRICA. The Ugandan Example. <http://www.virusmyth.com/aids/data/chrfafrica.htm> (14/7/1999)
- Feachem, R. G. & Dean T. Jamison (eds), *Disease and Mortality in Sub-Saharan Africa*. A World Bank Publication: Oxford University Press.
- Ford, N (1994) "CULTURAL AND DEVELOPMENTAL FACTORS UNDERLYING THE GLOBAL PATTERN ON THE TRANSMISSION OF HIV/AIDS". In David R. Phillips and Yola Varhasselt (eds) *Health and development*. London and New York: ROUTLEDGE (Pp83-95)
- Fumento. M, (1992) "AIDS is Not a Serious Problem for Heterosexuals" In David. Bender and Bruno Leone (Series Eds), Michael D. Biskup & Karin L. Swisher (Book Ed) *AIDS OPPOSING VIEW POINTS*. San Diego: Greenhaven Press, Inc (Pp31)
- Gulhati, K. and M. Bates (1994) "Developing Countries and the international Population Debate: Politics and Pragmatism". In R. Cassen (ed) *Population and Development: Old Debates, New Conclusions*. U.S. Third World Policy Perspectives, No 19 Washington: Overseas Council, (pp 47 – 77)
- Haq, C. (1988) "Data on AIDS in Africa: An Assessment". In Norman Miller and Richard C. Rockwell (Eds) *AIDS in Africa. The Social and Policy impact*. Lewiston/Queenston: The Edwin Mellen Press (Pp 9-26)
- Harvard (1994) "The AIDS Report" In *SpecialReport: Variability of HIV*. Winter 1994 http://www.hsph.harvard.edu/Organi...publications/TAR/tar_winter94.html (17/7/1999)
- Hartmann, B. (1987) *Reproductive Rights and Wrongs. The global Politics of Population and Development*. Boston, Massachusetts: South End Press.

HIV Dent, (1999) ZIDOVUDINE – AZT, ZDV A Commonly Used Medication For HIV & AIDS Patients. Internet site: <http://www.hivdent.org/drugs/ZIDOVUDINE.html> (13/9/1999)

Hodgkinson, N. (1993) “NEW DOUBTS OVER AIDS INFECTION AS HIV TEST DECLARED INVALID” In. *The Sunday Times* (London) 1 aug.1993. Internet site: <http://www.duesberg.com/nhtests.html> (17/7/1999).

IPPF and Cairo +5, (1999) Special edition for the International Women’s day 8 March 1999, (pp2)

Lesetedi, T.L, Gaboratanelwe D. Momphati, Pilate Khulumani, Gwen N. Lesetedi and Naomi Rutenberg, Ministry of Health, Family Health Division (1988) “The Botswana Demographic and Health Survey”. Colombia, Maryland: Institute for Development/Macro systems Inc.

Miller, N. and R. C. Rockwell (Eds) (1988) AIDS In Africa. The Social and Policy Impact. Lewston/Queenston: The Edwin Mellen Press.

Ministry of Health, (1997) National Conference on HIV/AIDS in Botswana. CONFERENCE REPORT. Report compiled. Printed and published by PERSONALISED CREATIONS (PTY) LTD on behalf of the AIDS/STD Unit, Ministry of Health, Gaborone.

Ministry of Health 1 (MoH), (1999) Statement by the Minister of Health at a press briefing in Gaborone on March 25th.

Mosedame, B (1997) “In the grave we are all equal” in *Botswana Gazette*, Gaborone: Printing and Publishing Company Botswana

Mulwa, J. (1997) “Overview of HIV/AIDS in Botswana” In Ministry of Health, *National Conference on HIV/AIDS in Botswana August 6-9, 1997. CONFERENCE REPORT*. Gaborone (Pp 41-50)

New York Times, (1989) Strong evidence discovered that AZT holds off AIDS in New York Times August 1989. 4;138 (47,952):A1,A16. Internet site: <http://208.229.231.93/health/Library/CAD/abstract10379.html>

Panos Institute (The) (1988) AIDS AND THE THRID WORLD. Panos Dossier. Published in association with the Norwegian Red Cross. London, Paris, New York. (Pp I &21)

Panos Institute (The) (1992) The Hidden Costs of AIDS. The challenge of HIV to development. London, Paris, Washington

Phillips, D. R and Yola Varhasselt (eds) *Health and development*. London and New: ROUTLEDGE York (Pp83-95)

- Rayment, T and N. Hodgkinson (1994) "AIDS HOPES DASHED BY TERRIBLE TRUTH ON AZT". In *The Sunday Times* (London) 10 April 1994. Internet site: <http://www.virusmyth.com/aids/data/nhdashed.html>
- Republic of Botswana, (1997) Botswana HIV and AIDS, Second Medium Term Plan, MTP II 1997-2002. NACP 38. Ministry of Health: AIDS/STD Unit. Gaborone,
- Republic of Botswana, (1997) National Development Plan 8, 1997/98 – 2002/03. Ministry of Finance and Development Planning. Gaborone: Government Printer:
- Republic of Botswana, (1993). BOTSWANA NATIONAL POLICY ON HIV/AIDS. Produced by Ministry of Health, Gaborone.
- Ross, E. B.(1998) *The Malthus Factor. Poverty, Politics and Population in Capitalist Development*. London and New York: Zed Books, (pp 73-78)
- Sanders, D, and A. Sambo, (1991) "AIDS in Africa, the implications of Economic Recession and Structural Adjustment" *Health Policy and Planning*, Oxford University Press. (Pp 157-165)
- Sen, A (1994) "Ingredients of Famine Analysis: Availability and Entitlements" Ch. 18, *Resources Values and Development*, Oxford: Basil Blackwell (pp 542-476)
- Silliman, J. and Y. King (eds) *Dangerous Intersections: Feminist Perspectives on Population, Environment and Development*. Cambridge, MA: South End Press, (pp33)
- Singh, J.S.(1998) *Creating New Consensus on Population*. London: Earthscan Publications Ltd
- Stine, G J. (1996) *Acquired immune Deficiency Syndrome. Biological, Medical, Social and Legal Issues*. Englewood Cliffs, New Jersey: PRENTICE HALL. Second Edition
- Thomas, C. A Jr, Kary B. Mullis & Phillip E. Johnson (1994) WHAT CAUSES AIDS? It's An Open Question. Internet site: <http://www.virusmyth.com.aids/data/kmreason.html> (6/9/1999)
- Timaeus, I.M. (1991) "Adult Mortality: Levels, Trends, and Data Sources". In Richard G. Feachem and Dean T. Jamison (eds), *Disease and Mortality in Sub-Saharan Africa*. A World Bank Publication: Oxford University Press. (Pp97)
- UNAIDS, (1998) UNAIDS PROGRESS REPORT 1996-1997. Executive summary.
- UNAIDS, (1999a) AIDS, 5 years since ICPD. Emerging issues and challenges for Women, Young people and infants. UNAIDS Discussion Document.
- UNAIDS, (1999b) "HIV AND HUMAN DEVELOPMENT: HIV/AIDS, THE DEVASTATING IMPACT OF AIDS". Extracted from *Demographic Impact of AIDS*. Carael M and

Schwartlander B (Eds): AIDS 1998 12: Supplement 1

UNAIDS, (1999c) THE UNAIDS REPORT. A joint response to AIDS in action.
UNAIDS/99.29E, June 1999. Geneva Switzerland

UNICEF AND GOVERNMENT OF BOTSWANA, (1993) CHILDREN AND WOMEN IN
BOTSWANA. A SITUATION ANALYSIS. PREPARED BY MAENDELEO
(BOTSWANA) FOR THE GOVERNMENT OF BOTSWANA AND UNICEF

Waite, G.(1988) "THE POLITICS OF DISEASE: THE AIDS VIRUS AND AFRICA" In
Norman Miller and Richard C. Rockwell (Eds) *AIDS in Africa. The Social and Policy
impact*. Lewiston/Queenston: The Edwin Mellen Press (Pp145-157)

Webb, D (1997) HIV and AIDS in Africa. Pietermaritzburg, Cape Town. University of Natal
Press

World Bank, (1997) Confronting AIDS. Public Priorities in a Global Epidemic. A World Bank
Policy Research Report. Published for the World Bank by Oxford University Press

World Bank, (1999) Why Strategies to Reduce Poverty in Africa Should Focus on HIV/AIDS
and Sexual & Reproductive Health. (Discussion Draft).

