THE DETERMINANTS OF HIV AND AIDS AMONG REPRODUCTIVE AGE GROUPS IN ZIMBABWE: A COMPARATIVE STUDY BETWEEN 1999 AND 2005 ZIMBABWE DEMOGRAPHIC HEALTH SURVEYS

BY

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DEDICATION

To my late father, JONISAYI, you were my source of inspiration, though you did not live to see your dreams coming true, you were a hero in my life and you are always remembered. Your sudden departure was a great loss not only to me, but to the whole family. We will ever miss you. REST IN ETERNAL PEACE SINYORO.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
CSO	Central Statistics Office
CSW	Commercial Sex Worker
FGD	Focus Group Discussion
GDP	Gross Domestic Product
HDI	Human Development Index
HIV	Human Immunodeficiency Virus
IDU	Intravenous Drug User
IEC	Information, Education and Communication
KABP	Knowledge, Attitude, Beliefs and Practices
MOHCW	Ministry of Health and Child Welfare

MTCT	Mother To Child Transmission
NAC	National AIDS Council
NGO	Non Governmental Organisation
OVC	Orphans and Vulnerable Children
PLWHA	People Living With HIV and AIDS
PSI	Population Services International
PTCT	Parent To Child Transmission
RAG	Reproductive Age Group
RH	Reproductive Health
SAFAIDS Services	Southern Africa HIV and AIDS Information Dissemination
SSA	Sub Saharan Africa
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
SPSS	Statistical Package of Social Scientists
UNAIDS	United Nations Programme on HIV and AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
USA	United States of America
VCT	Voluntary Counseling and Testing
WHO	World Health Organisation
ZDHS	Zimbabwe Demographic Health Survey
ZRHP	Zimbabwe Reproductive Health Policy
ZNBCS	Zimbabwe National Behavior Change Strategy

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This chapter is the introduction to the whole study. It consists of the background of the study, statement of the problem, justification of the study, objectives of the study, conceptual framework and the organisation of the study.

1.1 BACKGROUND AND CONTEXT OF THE STUDY

In Zimbabwe and Africa in general, 92% of HIV infection is transmitted through heterosexual intercourse and 7% is transmitted through mother to child transmission. This means that about 99% of HIV infection is transmitted through heterosexual sex, considering that vertical transmission is in itself a result of sexual transmission to mothers (National HIV and AIDS Strategic Framework, 2000-2004).

The first reported case of AIDS in Zimbabwe occurred in 1985. By the end of the 1980s, around 10% of the adult population was reportedly infected with HIV. This figure rose dramatically in the first half of the 1990s, peaking at 26.5% in 1997. But since this point, the HIV prevalence is reported to have declined, making Zimbabwe one of the first African nations to witness such a trend. According to government figures, the adult prevalence was 24% in 2001, and it fell to 14.3% in 2010 (MOHCW, 2008). The HIV and AIDS epidemic is one of the major development challenges facing developing countries today. HIV and AIDS is directly threatening the achievement of the eight Millennium Development Goals that were established following the adoption of the

United Nations Millennium Declaration by the Assembly in its resolution 55/2 of September 2000. The pandemic has put at risk the goals of eradicating extreme poverty, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health and creating a global partnership for development.

Today the HIV and AIDS pandemic is threatening to erode most health and other developmental gains. HIV/AIDS has devastated all regions of the world, knocked off decades of national development, widening the gulf between the rich and the poor nations and already stigmatised groups closer to the margins of society (UNAIDS 2002). Since its emergency around 1980, AIDS was recognised as a "global health problem of paramount importance" (Mahler, 1986). Zimbabwe is no exception.

There is evidence of positive changes in sexual behaviour. Condom use has increased, a higher number of young people are delaying first sex and the number of sexual partners has been reduced (UNDP, 2003). The Zimbabwe Demographic and Health Survey of 2006 showed that around 76 % of women and 81 % of men know that condoms can reduce the risk of HIV infection. It is reported that an increased awareness of HIV and AIDS has influenced these changes. In many cases, people may have changed their behaviour after witnessing the effects of the epidemic first hand, through the deaths of friends or relatives. One young Zimbabwean told reporters:

> *"I'm not sure if sexual attitudes are changing altogether, but I tell you around the streets of Harare you will see lots of used condoms on the ground". (Machingura, 2010)*

While it is encouraging that sexual behaviour change has helped to reduce HIV prevalence, there is still a long way to go. As the WHO country representative, Dr Custoda Mandlhate, has pointed out:

> *"a sero-prevalence rate of 12% remains high and this is not the moment for relaxing"*.

Efforts to prevent the spread of HIV in Zimbabwe have been spearheaded by the National Aids Council (NAC), non-governmental, religious and academic organisations. Prevention schemes have been significantly expanded since the turn of the millennium, but remain critically under-funded (World Bank, 2000). In addition to the impact of mortality, prevention programmes aimed at behavior change, the prevention of mother to child transmission have also been instrumental in bringing about a decline in HIV prevalence. (UNFPA 2004)

Children in Zimbabwe are currently taught about HIV and AIDS in schools. In 2006, the Ministry of Education, Sport, Arts and Culture, and UNICEF initiated an in-service training scheme for primary and secondary school teachers in HIV and AIDS life-skills and counseling (Jackson H, 2000). By the end of 2007, around 2753 primary and secondary schools had been reached by the scheme. Outside of school, efforts to educate and inform people about HIV and AIDS (which are often organised by NGOs) have used a number of different means to convey prevention messages, including television and radio, drama, and community groups.

The most frightful long term characteristic of the HIV/AIDS epidemic is its impact on life expectancy, instead of reaching an average of 64 years by 2010-2015, life expectancy in Sub Saharan countries will regress to an average of just 40 years, a reversal of most

development gains over the past 30 years. People have died of HIV at an alarmingly high rate in Africa. Consequently, Zimbabwe now has one of the highest rates of infection and numbers of HIV/AIDS in the world to the extent that the country is one of the nerve centers for HIV/AIDS in the world. It is apparent that Zimbabwe as country cannot go forward when its young people are trapped in an HIV/AIDS vicious cycle, yet as Mbureno Mwenga (2000:118) notes "little research has been done to determine the factors affecting sexual behavior especially among reproductive age groups"

1.2 STATEMENT OF THE PROBLEM

Zimbabwe is in the mature stage of a generalized epidemic. This means that HIV is spreading throughout the general population rather than being confined to populations at higher risk, such as sex workers and their clients, men who have sex with men, and injecting drug users. An estimated 2.3 million Zimbabweans out of a population of 11.6 million people are living with HIV and AIDS (MOHCW 2009). Zimbabwe is the first Southern African country to record a significant drop in HIV prevalence rate in the adult age group (15-49). The rate dropped from 25% in 2003 to 20% in 2005 to 18% in 2006, 15.1 in 2008 (Government of Zimbabwe 2006) 14.3% in 2009 and ultimately 13.7 in 2010 (MOHCW 2009). However, this level remains unacceptably high, especially when compared with Western Countries like the U.S.A where the prevalence rate is below 0.5%. Thus, there is great need for Zimbabwe to attain such a figure. This study seeks to identify the major factors which have contributed to the decline of the HIV prevalence rate in Zimbabwe. It is also important to find the determinants of HIV infection which have shifted the prevalence of HIV in Zimbabwe, how they have changed and which

determinants are resistant to change. It is also of importance to determine what can be done to enhance the decline of HIV prevalence in Zimbabwe.

In addition adolescents bear the brunt of the epidemic; it is therefore important to understand their knowledge, attitudes, beliefs and practices underlying HIV/AIDS if policies are to be redirected to meet their needs. There is also gender bias in infection rates at younger ages with women bearing the brunt of infection. Thus, adolescents have since been highlighted as a group in need of sexual and reproductive health information services. Many people get infected in youth and die in adulthood between 25 to 49 years of age, in their most productive and reproductive ages. These shattering rates among the adolescents are clear testimony of Zimbabwe's failure to capitalize on its "window of hope", the 0-15 year olds.

1.3 JUSTIFICATION OF THE STUDY

The continued escalation of HIV and AIDS infections has confirmed Zimbabwe as having one of the highest rates of HIV/AIDS infections in the world (Mhloyi 2001). This has made Zimbabwe one of the nerve centers for the AIDS epidemic despite various intervention strategies that have raised questions as to whether Zimbabwe is resistant to behavioral change in the face of HIV/AIDS. This study is a comparable one, it is meant to assess whether there is any change in knowledge, attitude, beliefs and practices regarding HIV/AIDS among reproductive age groups from the year 1999 to 2006.

Lots of efforts and progress have been made and recorded pertaining to the understanding of the major determinants of HIV and AIDS but most of the researches on the

epidemiology of HIV/AIDS are mere baseline studies which lack trend analysis of the determinants of HIV infection, and such studies are too descriptive in nature. In addition, most cross sectional studies which were employed were not comparative studies hence neither the patterns of change nor the trends of the risky factors can be noticed.

Trend analysis studies seek to give an understanding of the patterns of change over time especially on factors underlying the epidemic. Such comparative studies enable the nation to comprehend the dynamic nature of the factors behind the rapid propagation of HIV so that the intervention strategies are constantly modified to suit the ever changing environment.

Thus, this project seeks to undertake a trend analysis and comparative study of the major determinants on HIV infection. This study will also identify the major challenges faced by the reproductive age group, and suggest some possible measures to the challenges they face.

1.4 OBJECTIVES OF THE STUDY

The main objective of this study is to undertake a comparative study of the determinants of HIV infection between the 1999 ZDHS and the 2005/6 ZDHS. This objective will be addressed through the achievement of the specific objectives below:

- To establish and assess the determinants of HIV and AIDS among the 15-49 age groups between the 1999 and 2005/6 surveys,
- To establish the gender differentials in HIV and AIDS among reproductive age groups.

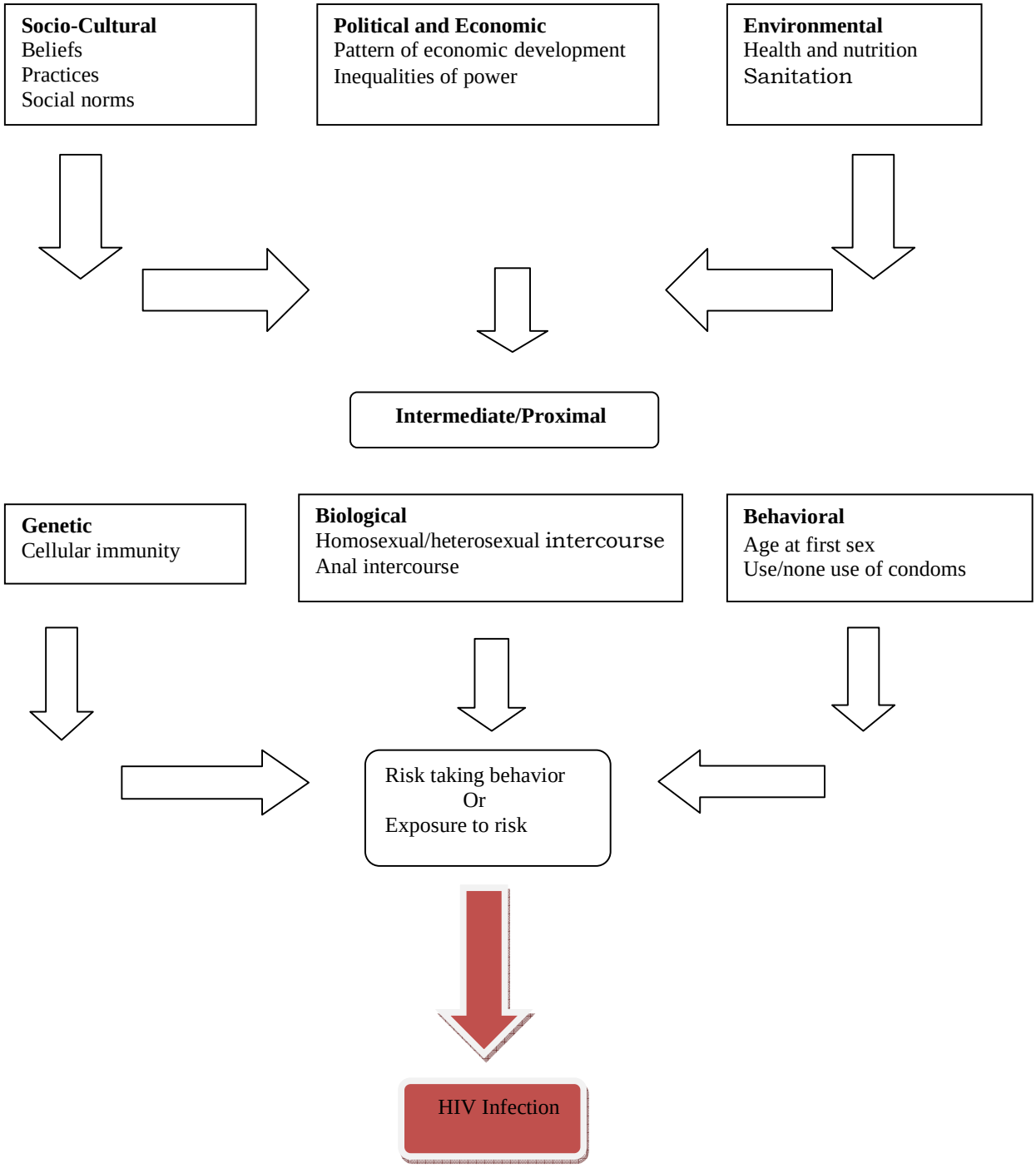
1.5 THE CONCEPTUAL FRAMEWORK

The prevalence of HIV and AIDS is a product of background factors (political, economic and the general governance) and the intermediate factors (poverty, gender and culture) which operate together to determine the prevailing cultural and socioeconomic environment. The socio-economic environment will in turn determine the sexual behavior of people hence their vulnerability to HIV and AIDS. It is therefore imperative for the nation to implement broad HIV and AIDS intervention strategies which not only target behavior change but also aim at addressing the background and the intermediate factors from which the risky behavior is emanating. It is therefore out of this context that the Conceptual Framework of this study was designed.

The interaction between the background factors, the intermediate factors and the proximate determinants will determine the effectiveness of the HIV/AIDS prevention and intervention strategies. It is this effectiveness of the HIV and AIDS prevention interventions together with the background and intermediate factors that determine the behavior of the people (risky or safe behavior).

CONCEPTUAL FRAMEWORK

Routes to HIV Infection



Research and intervention strategies on HIV/AIDS in sub-Saharan Africa are increasingly recognising the socio-cultural, economic, environmental and political dimensions of the HIV and AIDS epidemic. Gender inequality, manifesting itself in double sexual standards for males and females; the general vulnerability of women which partly accounts for a wide range of female reproductive health problems; and variation in socio-economic and political status by gender, have emerged as some of the factors increasing the spread of HIV infection in parts of Africa. Lack of male circumcision has also been suggested as a possible reason for elevated rates of female-male infection in parts of Africa Caldwell and Caldwell 2002). Other factors such as poverty, type of residence, mobility, displacement as a result of wars and social as well as political unrest have been associated with the spread of HIV among some groups of people.

Socio-cultural issues at home and in the community with its associated norms and values, kinship and marriage, signs of communication and the development of attitudes, preferences and behavioral patterns, issues such as gender inequality, gender roles and the perception of life and death are, to a large extent, the outcome of the socialisation process of the individual. All these factors reinforce one another and contribute to shaping people's normative behavior including sexual activity and risk-taking behavior. Although 'culture' does not condemn members of a collective to a static and common way of life and although that culture may be dynamic, the institutions and the processes of socialization largely influence people's attitudes and behavior.

Factors under this heading include broad indicators of the political economy of a country or region which, either directly or indirectly influences whether people live or die. First, the pattern of socio-economic development inherited from colonial governments and continued after independence has created spatial inequalities within countries. This has in turn led to migrations from the less developed to the more developed areas. Poverty, both absolute and relative, has been found to influence the actions of individuals and groups. A number of researchers have alluded to the contribution of poverty to risk-taking behavior. On the other hand, access to high income and other resources has also been associated with such risk-taking behavior as multiple partnerships. Political instability leading to minor wars and major upheavals as well as human rights abuses in some parts of Africa also contribute to refugee situations in some areas and collective vulnerability in others. These have in turn contributed to some degree of risk-taking behavior.

Environmental factors include such elements of life as sanitation, diet, available health care and malnutrition. These may contribute to the individual's vulnerability to opportunistic infections. In Africa such aspects of life and the environment are known to contribute to the high level of HIV transmission.

The contextual factors do not, by themselves, lead to risk-taking behavior but rather operate through some proximate factors to either hinder or elevate the level of HIV infection. The proximate factors are individual genetic, biological and sexual behavioral patterns that directly influence transmission and infection. These are (1) genetic factors: HIV-1 versus HIV- 2, subtype of virus, cellular immunity, and virus-cell relationships;

and (2) biological factors: reproductive tract infection and sexually transmitted diseases, homosexual or heterosexual relations, anal intercourse, intercourse during menstruation, male circumcision, use of vaginal products, stage of the disease of discordant partner, and level of prevalence in the community.

A number of studies of HIV infection have identified 'risky' behavior, such as non-regular multiple partnerships, which may be serial or use or non-use of condoms; use of contaminated needles and skin-piercing instruments; and blood transfusion. Age at first intercourse and the related circumstances can also constitute 'risky' behavior. These proximate factors interact with one another to create conditions for infection. For instance, the probability of being infected will be higher for a person with multiple partners in high-prevalence areas than for another person with the same number of partners in a low- prevalence area. Similarly, the level of infectivity of an infected person has implications for the rate of transmission to the discordant partner where condoms are not used. These proximate factors then lead directly to risk-taking behavior or exposure to risk of infection. The social meaning of diseases, for instance, determines people's health-seeking behavior. This can lead to exposure to risk such as the use of the services of unqualified health workers in villages, blood-letting for the cure of some diseases at fetish shrines and an inability to seek help early.

1.6 ORGANISATION OF THE STUDY

The study is divided into five chapters. Chapter one presents the background of the study, statement of the problem, objectives of the study, the justification of the study and the study's conceptual framework. Chapter two focuses on the literature review. Chapter

three covers the methodology of the study. The main findings of the determinants of HIV and AIDS among reproductive age groups are presented in chapter four. Chapter five discusses the findings and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

In this chapter, the literature review focuses on the levels, trends, and determinants of HIV and AIDS at different scales that is, from global to local level. The chapter discusses the global situation of HIV and AIDS followed by Sub Saharan Africa situation and the Zimbabwe situation. The chapter further highlights some of the major impacts of HIV and AIDS on the health delivery system of Zimbabwe.

2.1 Global Overview of HIV and AIDS

An initial clinical evidence of HIV and AIDS was reported in 1981 in the United States of America and has since become an AIDS epidemic which has spread worldwide (Norman, 2003). By 2001 it was globally estimated that 40 million people were living with HIV and many had died from this debilitating disease (Norman, 2003). By 2003 the number of people living with HIV and AIDS globally had risen to an estimated 44.3 million and an estimated 3.1 million people had been killed by AIDS. The number of people living with AIDS has been steadily rising in every region of the globe. For example, the number of people living with HIV and AIDS in East Asia rose by almost 50% in 2004, an increase largely caused by China's growing epidemic (UNAIDS 2004). In Eastern Europe and Central Asia there were 40% more people living with HIV by 20004. However, sub-Saharan Africa remains by far the most affected region with 28.4 million people living with HIV by 2004 (UNAIDS, 2004). The number of people living

with HIV and AIDS in Zimbabwe increased to 1,963,503 in 1999 and decreased to 1,320,739 in 2007 (Ministry of Health and Child Welfare 2007).

2.2 HIV and AIDS in Southern Africa

The most affected region in the world is Africa, where the death of parents to AIDS is causing many homes to be child-headed. Globally, two-thirds of people living with HIV are in sub-Saharan Africa (UN AIDS 2005). Again, according to UN AIDS (2005), by 2010 there is likely to be 40 million orphaned children whose parents died of AIDS, 95% of whom will be from Southern Africa. Currently there are 12 million children orphaned is sub-Saharan Africa because of AIDS, and regrettably they too are being exposed to this disease for many reasons, such as economic hardship, lack of awareness and misconceptions about how the disease is contracted, and mother –to-child transmission (UNICEF 20005). It was also reported that orphaned girls are three times more likely to become infected than girls whose parents are alive. Sub-Saharan Africa also has high poverty rated, natural diseases such as malaria and influenza, violent conflicts, social instability and inadequate public health infrastructure which increases vulnerability of its inhabitants to HIV and AIDS and other diseases (UNICEF 2005).

HIV and AIDS have reached pandemic levels in sub-Saharan Africa, with more than 23 million adults living with the disease. By 2003 Botswana, Zimbabwe and Swaziland had the highest prevalence rates in the world (Population Reference Bureau 2003 datasheet). This scenario was also reported by Baylies and Bujra (2000), who also noted that Africa

was facing an overwhelming and demoralizing crisis in the 21st century, and had over 70% of the worlds HIV positive people. Many of these HIV-positive people are in the dawn of their productive and reproductive years, thus impacting on development efforts of the region and casting a cloud of doom over the future. There are many disturbing reasons as to why sub-Saharan Africa is the epicenter of the pandemic. The National Research Council (1996) argues that the region has suffered the strongest impact of the epidemic because it is "geographically, demographically, socially and culturally heterogeneous", and heterogeneous sex is the highest transmitter of HIV and AIDS.

Within sub-Saharan Africa, southern Africa remains the world's worst affected region. Of the 10 countries in this region, seven have adult HIV prevalence rates above 15% (MOHCW 2009). Both Botswana and Swaziland have HIV prevalence rates between 35% and 39%, followed by Lesotho (31.7%) and the Zimbabwean prevalence rate has dropped to 13.7% (MOHCW 2009).

2.3 The HIV and AIDS Situation in Zimbabwe

In Zimbabwe, it is estimated that close to 27% of youth aged between 15-24 years are HIV positive, MOHCW (2005). The proportion of youth aged between 15-24 years which is HIV positive is estimated at 10.7% in 2005, 10.9% in 2007 and 11% in 2009. Since the first AIDS case in Zimbabwe was reported in 1985, the progression of the HIV epidemic has been very rapid, in terms of prevalence and incidence. By 1987, 119 cases of AIDS had been diagnosed. That figure rose to 202 in 1988 and 1311 by 1989. The

number of HIV-infected persons in the population (including children) rose from 1311 in 1989 to nearly 1.8 million in 2003 as the epidemic expanded rapidly throughout the country (NAC 2003). Currently, the prevalence has decreased to 13.7% from a peak of 33.5% in 1998, a considerable and encouraging decrease but still leaving Zimbabwe as one of the worst affected countries (MOHCW,2010).

Among some of the many factors driving the AIDS epidemic in Zimbabwe is what Mhloyi (2001) calls a conspiracy of silence embedded in Zimbabwe's culture. Mhloyi argues that when people are wrapped in a conspiracy of silence, sexuality is expressed without words, and culturally, parents do no talk to their children about sex, people are left to discover by themselves through trial and error about sex and this increases their vulnerability to contract HIV.

In Zimbabwe, like most developing nations, the future projections of the extent of the HIV and AIDS epidemic cannot be made with definite precision; what happens next will depend on what action is taken by all levels of people today. In some scenarios, governments and societies mount a very vigorous and wide-ranging response which recognizes AIDS as much more than just a health issue, and so HIV prevalence eventually decreased; in other projections, good intentions fail to deliver anything more than short-term and fractured responses in the worst-affected countries, and the number of people living with HIV soars. Although there are promising signs that the epidemic is in retreat, the World Health Organisation predicts that AIDS will remain a leading cause of death worldwide for decades to come (UNAIDS/WHO 2005). Minimizing the impact

of HIV will require massive responses at personal, community, national and international level.

While adult HIV prevalence in Zimbabwe has dropped over the years from an all-time high of 33.5% in 1998 to the current 13.7% in 2009, a prevalence rate of 13.7% is still too high considering that other nations have a single-digit prevalence rate (MOHCW 2009). In 2003, adult HIV prevalence in Zimbabwe was 24.6% and it dropped down to 18.1% in 2005/6. The prevalence further dropped to 15.6% in 2007 and currently it stands at 13.7% (MOHCW 2009).

It is imperative that all Zimbabweans should join hands in the fight against AIDS. Everyone has a social responsibility, not only to assist people infected and affected by HIV and AIDS but also to assist groups or people who are vulnerable to HIV and AIDS. However before assistance is offered, it is important for the very groups that are vulnerable to perceive their vulnerability and to express their thoughts about their vulnerability in order for strategies to be put into place which would reduce their risk factors. It is important for vulnerable groups, if indeed not for everyone, to assess their knowledge, attitudes and behaviors regarding HIV and AIDS as a starting point if headway in the fight against the epidemic is to be made.

The acceleration of the epidemic in Zimbabwe is through heterosexual transmission i.e. 92%; 7% of transmission is through mother-to-child and a very small percentage, as little as 1%, through other routes such as infected blood (MOHCW 2009). Over 80 000 people

are on ART out of an estimated 250 000 who need it; nearly 3000 people die of AIDS-related illness every week. About 158798 children are infected with HIV, while about 29809 children die every year from AIDS-related ailments (MOHCW ANC Survey Report, 2007). Prevalence among women is 21.1% and prevalence among men 14.5%, and there are more females living with HIV when compared to their male counterparts.

The estimated number of adult women living with HIV and AIDS has been higher than the number of men since 1989. The number of men infected in 1998 and the number of women infected peaked in 1999. The numbers declined in subsequent years (refer to figure 2.3). The adult prevalence rate (aged 15-49) was 15.6 in 2006/7. The adult prevalence rate for 2009 was 13.7. According to ZDHS 2007, women prevalent rate was 21.1 and male prevalent rate was 14.5. These statistics are alarming indeed. Furthermore, many myths and misconceptions regarding HIV and AIDS are still being accepted as true, such as AIDS being 'runyoka'; that sleeping with a virgin cures AIDS, that AIDS cannot be spread through casual sexual contact with an HIV infected individual; showering after intercourse will prevent AIDS or that HIV is transmitted by mosquitoes.

2.4 THE THEORY OF BEHAVIOR CHANGE

One of the theories that seek to explain behavior change is the protection motivation theory propounded by Rodgers (1975) (as quoted in Chingombe, unpublished). The theory was designed to investigate the effect of persuasive messages on the adoption of health protective behavior. According to the theory, information about health hazards associated with an object stimulates cognitive appraisal of the vulnerability to the

negative event. This appraisal acts then as a mediator of the persuasive effect of the message, by arousing the motivation to protect one's self. It is this motivation that arouses, sustains and directs preventative behavior. Later on the theory was extended by Madux and Rodgers (1983) to include the component of self efficacy which is the person's perception of his ability to initiate and sustain a specific precautionary behavior. Thus individuals with high self efficacy, despite their evaluation of personal vulnerability are likely to adopt precautionary behavior compared with individuals whose self efficacy is low.

Regarding the adoption of precautionary reproductive health behavior, Rodgers theory suggests that information about HIV and AIDS and other reproductive health risks faced by sexually active people will make them evaluative of their own vulnerability to the risks. If from such evaluations they find that they are highly vulnerable to the risks then they will adopt precautionary measures to protect themselves. After such an evaluation they may see if necessary to use condoms or abstain from sex and to seek VCT services.

2.5 DETERMINANTS OF HIV AND AIDS

SEXUAL BEHAVIOUR

Early Sexual Debut

Most young people become sexually active in their teens, and many before their 15th birthday (UNAIDS 2006). Factors such as increasing urbanization, poverty, exposure to conflicting ideas about sexual behavior and the breakdown of traditional sexuality and reproduction information channels are encouraging premarital sexual activity among

adolescents. According to WHO, 2006, studies have shown that adolescents who begin sexual activity early are likely to have sex with more partners and with partners who have been at risk of HIV exposure and not likely to use a condom. In Zimbabwe, the median age at first sex (age when half of the young people already have had sex) is above 18 for both men and women, ZNBCS, (2006). This means age at first sex is among the highest in the World. In a study carried out by Erulka and Phiri (2005) 30% of girls have had sex by the age of 15. This means that at this tender age they cannot negotiate for safe sex and are still shy to talk about condoms thus they engage in sex without any protection. This would put them at the risk of contracting HIV. In the UNAIDS update (2006), increase in sexual debut has been noted as a contributing factor in lowering Zimbabwe prevalence rate.

Intergenerational sex

In Zimbabwe, intergenerational sexual relationships, sex between young women and older men and vice versa are the major entry point for HIV. Situations where younger men date women ten or more years older are significantly low in Zimbabwe. But cases where older men date women ten or more years younger are significantly high. Fapohunda and Rutenburg (2004) in their research on intergenerational sex found that about 40% of his older male respondents reported ever dating a girl 10 years younger than they were while a paltry 3% of men aged between 15 to 29 years ever dated a woman 10 or more years older than they were. Older men also tend also to assume that younger women are “safe” thereby rendering them vulnerable HIV infection, ZNBCS (2006-2010, 2008). Such kinds of relationships are trivial in that the older partners if

infected may easily pass the infection to their younger partners. Later on, the young infected ladies will again infect boys of their generation. Of importance to note is the fact that negotiations of condom use may be very low in such relationships.

Multiple and concurrent sexual relationships

Multiple and concurrent sexual partnerships (with low levels of condom use in long term relations) is a factor underlying high HIV prevalence among people in Zimbabwe. Multiple sexual partnerships, especially those that occur concurrently in a person's life e.g. small houses, polygamy etc, contribute to the spread of HIV. YAS reported that, among young adults aged between 15 and 29, 29 % of women and 63 % of men had two or more lifetime partners. According to the ZNBCS (2006- 2010), concurrent partnerships (more than one partner in parallel) in adult and marriage relationships are a special risk which exposes sex partners to particularly high levels of infection.

Transactional sex

Transactional sex is another determinant of the spread of STIs and HIV and AIDS. This kind of practice is very common among wealthy men with young and in many occasions' single women. During such relationships, the female partner will have little, if not no power to determine the outcome of the activity. She can even fail to negotiate for protected sex if ever the client has paid more to have unprotected sex. Results from a study by Murray N. and London D (2004) indicated that the estimated odds of women engaging in transactional sex are higher among women in the younger age groups than for women 25 years and older in Zambia and Zimbabwe. They also found that 60% of

single women engage in transactional sex than married women with only 12%. This therefore means that single and younger women are at risk of contracting HIV since they are the most targeted by the elite men.

Commercial sex

Sex workers refer to a wide array of people who sell sex, and who work in a variety of environments. They include women, men and transgender people and people who may work either full time or part time, in brothels, or bars, on the street or from home for example. The selling of sex to a variety of clients is a major determinant of HIV in Zimbabwe and many other countries. A study by Machingura (2010) with CSWs in Harare, revealed that the CSWs are unable to negotiate condom use when a client pays more than the normal charges and request unprotected sex. In such cases, both men and women will be exposed to higher risks of contracting STIs. ZDHS (2005/06) revealed that the widowed, divorced and separated men are usually involved in paid sex. According to the ZDHS (1999) 7% of men were reported as paying for sex and 82% of that proportion reported condom use in those relationships. But in 2005/06 ZDHS, 4% men reported paying for sex. However 74% of these respondents used condoms in their last paid sexual encounter. Notably, that slight decrease in condom use had some significant negative impacts especially in exposing men to STI infections.

Sexual Abuse and Coerced Sexual Relationships

From a very early age, many young women experience forced sex. Violent or forced sex can increase the risk of transmitting HIV because forced vaginal penetration commonly causes abrasions and cuts that allow the virus to cross the vaginal wall more easily

(UNAIDS 2004). In Zimbabwe, reports of rape are increasing and many of these cases are among the minor below 16 years of age. Factors that underlie the rise in reported rape are undoubtedly multiple. These include social disruption with urbanization and the loss of family controls, Marsh et al (2005). Most commonly reported rape cases include those which follow beliefs that young girls are clean and safer sex partners, Jackson (2000). According to Basset, (2000) sugar daddies, who may be teachers, relatives, friends of the family, well off members of the community or church, or complete strangers are coercing young girls into sex on the promise of gifts, money, marriage or other benefits. With this, young girls have no option but rather indulge in sex. In a study by Timberlake and Johnson (2006), 66% of women experience forced sex. These women include young girls, married women and those who are single. Forced sex exacerbates the spread and contraction of HIV since these women cannot negotiate for safe sex once the action is due to coercion.

Intra- vaginal practices such as dry sex also contribute to the spread of HIV in Zimbabwe. This is practiced by women for reasons such as to please their husbands sexually but exposing them to type risk of HIV infection. Dry sex increases friction during sexual intercourse leading to skin or condom breaking thereby increasing the chances of infection Wilson (2003).

Anal sex is the riskiest practice when it comes to HIV infection although there are no clear studies to show the extent of anal sex in Zimbabwe. The epidemic in Zimbabwe is generalized and mostly happening in heterosexual relationship, ZNASP (2006-2010).

2.6 SEXUAL PERCEPTIONS

UNDP (2004) states that the ability of young women to protect themselves from infection is a direct function of power relations between men and women and also the perception both men and women hold regarding sexuality. Balmer et al (2005) cites a Kenyan study which women felt that they did not have control over their sexuality because sex was something that happened to them and not something they could initiate or actively participate in. in this regard a woman's good sexual health is dependent on the goodwill of the man in her life. According to SAFAIDS (2003), women in Southern Africa have to prove their fertility by getting pregnant before a dowry is paid since their worth is based on their ability to bear children. This type of gender misconception encourages young women to behave in a risky sexual manner by engaging in unprotected sex in order to conceive.

2.7 CULTURAL PRACTICES, BELIEFS AND GENDER IRREGULARITIES

Many traditional and cultural practices increase the risk of young people more than adults and for young women more than young men. Lack of empowerment against the prejudicial cultural and traditional practices in sexual reproductive matters and relationships restricts women's decision making regarding risky situations. Several cultural practices have a negative impact on the status of women. This prompted Mhloyi et al, (1998) to conclude that there is great need to reach at a consensus on how to deal with practices that demean women. In Zimbabwe there are cultural practices that fuel the

spread of HIV and AIDS. These include girl child pledging to appease the spirit of the dead (kuripa ngozi), widow inheritance (kugara nhaka), daughter pledging (kuzvarira), and cutting of skin using razor blade so as to apply medical staff (kutemera nyora).

Widow inheritance is twofold in that if both people i.e., the one who is “inheriting” and the one who is “being inherited” are both not tested, there is risk in that the deceased partners may have been positive and/or the one “being inherited” may also be positive. In girl pledging the young girl is usually being exposed to an older sexually experienced person, who may have been exposed to sexual illness. Similarly a young sexually active girl may also infect an older person.

The Zimbabwe Open University students in the Harare region conducted a study on cultural practices that fuel the spread of HIV in 2003. In their study they found out that kugara nhaka (wife inheritance) reported 74%, polygamy 55%, kuzvarira (pledging of daughters) 24% and all the mentioned above exacerbates the spread of HIV and AIDS.

The legal systems coupled with cultural norms, values and practices in Zimbabwe have bred a male psyche that is characterized by an internalized, insatiable and self centered desire for sex with multiple partners, coupled with an intolerant attitude towards women who are perceived to be primarily, objects for sexual gratification and child bearing (Chiroro et al 2002). Such a psych and behavior significantly increase the chances of these men to be infected by the HIV virus and subsequently passing it on to the next female counterparts.

Culture has been found to be the number one barrier to behavior change. UNDP (2006) states that *"most if not all cultures raise girls differently from boys and treat women differently from men"* and in most cases men are socialized t assume a superior role over their female counterparts and women are socialized to be subordinates to men. Unfortunately this upbringing has a bearing on the manner in which young people approach issues to do with their sexuality. SAFAIDS (2006) stated that "a combination of dependence and subordination makes it very difficult for girls and women to negotiate safer sex or end relationships that puts them at risk of HIV and AIDS infection". All this make women objects and become more prone to sex related diseases and restrict their ability t protect themselves from STIs (Marson 2002).

On the other hand, Caldwell et al (2002) argues that "because of culture, men are believed to have a natural or biological need for sex that makes it unacceptable for them to accept sexual acquiescence in a single relationship but to have multiple sexual partners". This cultural stereotype also put the young men at risk of contracting HIV as they will be under pressure to be "real man". According to Rivers and Aggleton (1999) *"dominant ideology versions of masculinity encourage young man to seek sexual experience with a variety of partners"*. UNAIDS (2006) also states that:

> "*Prevailing views about masculinity and manliness encourage men to demonstrate sexual prowess by having multiple sex partners and by consuming alcohol and other substances that may lead to risk taking and violence"*.

Most Zimbabwean married women suffer silently because of shared power relations between husband and wife. The Zimbabwean culture bestows upon the husband almost total power and control over his wife (Chiroro, 2002). Furthermore studies in Sub Saharan Africa indicated that women are less likely to use condoms than men due to gender related power dynamics, making it more difficult for women to request for the use of condoms (Norman, 2003). Findings by YAS are also consistent with Norman's argument on the risky behaviors women are exposed to. YAS found out that at least 24% of women aged between 15 and 29 years are forced to have sex at some point in their lives, whilst 3% of the sexually experienced men in the same age group have four or more lifetime sexual partners, YAS (2002).

Despite the availability of modern medicine in Zimbabwe, many people still rely on traditional and faith healers for advice and healing. Nevertheless, in the healing process, the traditional healers use unhygienic and unsterilized instruments which could spread infections among patients. Some churches such as the Vapostori encourage polygamous unions and marriages of young girls to older men. Views such as the mentioned below encourage the spread of HIV and AIDS. In a study by Muhwava et al (2007), several sentiments were echoed and some of them include the below:

'*churches such as the Johanne Marange Sect can tell you that they have dreamt about you being in love with a certain older member therefore you have to get married to that man who already has other wives'*,

'*when you reach 12 years they say that you are old enough to be married so you marry an older man who may have the virus'*.

Traditional healers may also give advice to clients to sleep with young girls in order to cleans themselves of HIV and AIDS infection or as means to prosper in their businesses. Similar sentiments were echoed pertaining to faith healers in a study by Muhwava et al (2007);

> '*faith healers may tell you that they want to go up the mountain to heal you and they then lie that what is bothering you is in your private parts, therefore he has to sleep with you in order to heel you, then you get the infection from that'*.

2.8 SOCIO-ECONOMIC FACTORS

Social and economic power differences between sexual partners from different age groups may compromise the younger partners (usually women) ability to negotiate for safe sex. Socially men/husbands tend to have more power when it comes to sexual matters that their counterparts. In a research carried out 2007 by Regai Dzive Shiri and Zachire project, one woman was quoted saying "men tend to decide on how sex is done thereby rendering women vulnerable as they cannot negotiate for safe sex, NBCS Baseline Study (2007/8)."

The issue of poverty as the underlying factor that puts young women at risk comes out vividly from girls in and out of school. In trying to break the vicious cycle of poverty, some parents marry off their daughters to "perceived" well – to- do men, Chiroro et al (2002). In most cases these men are married, more sexually experienced and indulge in extra marital relationships which put the young girls at high risk of contracting HIV/AIDS, Jackson H, (2000). For instance both male and female students at tertiary

institutions and secondary schools in Zimbabwe are reportedly involved in transactional sex for meals, transport and luxury items, HDR, (2003). Some of the female students confirmed that older men were paying huge amounts of money to unprotected penetrative sex and this increases their chances of contracting the deadly virus.

2.9 SERVICE DELIVERY FACTORS

Limited Access to Sexual and Reproductive Health Services

Young people are denied access to information, services and resources that help them to protect their health. There is evidence that having STIs enhances HIV transmission considerably, but adolescents are less likely to seek health care for symptoms than adults. It is most likely that they lack money or they may be embarrassed. In addition health staff is more likely to scold young patients and generally treat them with disrespect, Basset, (2000). Moreover, sexual and reproductive health services are inaccessible particularly teenage girls because of fear of stigma and denial by adults. The judgmental attitudes of both parents and health staff towards sexually active girls may deter them from seeking appropriate treatment and contraceptive advice.

Furthermore, condoms are the only dual contraceptive method that can protect people from HIV, STIs and pregnancy at the same time. However condoms are not widely accessible to young people mainly due to the adult's views on condom use and young peoples' sexuality. Most adults believe that Sexual and Reproductive Health services such as family planning services were most likely to encourage promiscuity among youths, Mavheneka (2000). The widespread denial of adolescent sexuality leads to

attempts by adults to constrain and control young peoples' sexual behavior. Furthermore, limited access to information and education and communication material to make informed decisions, fuels the contraction and spread of HIV/AIDS.

2.10 KNOWLEDGE ABOUT HIV AND AIDS

Most first sexual encounters are believed to be unprotected. This may be a factor of low knowledge levels and experience in using any form of protection. Also at these moments, men will still be having some elements of trust in their partners. Failure to use condoms during fist encounters results in disastrous tragedies (Zinhanga in UNICEF 2001). The National AIDS Council (NAC) Report of 2007/08 showed that only 11% of men age between 18 and 24 years had used a condom during first sex. Fifty two percent of men between 18 and 24 years who were not married had sex using a condom during their last sexual encounter.

Self efficacy is a proximal and direct predictor of intention and of behavior. According to the Social Cognitive Theory by Bandura 1997, a personal sense of control facilitates a change of health behavior Lowenson and Whiteson (2004). In a study by Wekete N and Madzingira N, 45.3% of girls showed high levels of self efficacy in refusing sex. In addition girls who had never had sex were more likely to have self efficacy in refusing sex compared to the sexually experienced. Thus, girls who are not sexually experienced have some knowledge about the risks of having sex and the repercussions of unprotected sex compared i.e. contacting HIV as compared to older and experienced girls.

Knowledge encompasses the perceptions of vulnerability and basic knowledge about population level risks of HIV and AIDS as well as methods of protection. Negative attitudes towards protected sex are a proxy for STD transmission. On the other hand the ability to use protection reduces one's chances of getting infected. The National HIV and AIDS Strategic Framework (2002-2004) reported that 92% of STIs and HIV transmission were through heterosexual sex.

Condom use as a prevention method of STI and HIV transmission is generally low among Zimbabwean men despite the high knowledge levels on condom use and its advantages. This practice is strongly attributed to socio-cultural misconceptions held by men on condom use. Chiroro et al (2002) found that men believe that the essence of having sex is to feel the pleasure of intercourse and have children. But condoms are believed to defeat both purposes hence they shun condom use. Low levels of condom use will be increasing chances of contracting STI and HIV. Over 90% of male youths in Chiroro's research believed that condoms are infected with STDs while others stressed that condoms have got small holes which make them porous to pathogens. Very few people in the FGDs he conducted unanimously endorsed condom use as a safe method for the prevention of STIs and HIV. Some respondents mentioned male circumcision as a successful method of preventing STI infections.

Widespread knowledge about RH issues is one foundation to dealing with the RH problems. While availability, affordability and accessibility are other factors which see one being able to deal with any RH problems. A wide range of RH services are common

to men. There is widespread knowledge on STIs and AIDS and even the prevention methods (NAC 2007). But despite the knowledge, availability affordability and accessibility there are still high levels and incidences of STIs and HIV and even risky sexual behaviors. NAC (2007/08) reported that respondents in their study demonstrated good knowledge although there were important gaps in knowledge. About 54% agreed that HIV can be transmitted by mosquito bites while 59% said that HIV can be transmitted through sharing utensils. About 38% reported that AIDS can be cured.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter presents and discusses the research methodology. The important components of the research methodology included in the study are the study design, study area and population, sampling procedure, data collection (Research methods and instruments), data analysis, research ethics, study limitations and organization of the study.

3.1 STUDY AREA AND POPULATION

The research utilized secondary data from the Zimbabwe Demographic and Health Survey (ZDHS) 1999 and 2005/6 which was collected by the CSO. This data has been selected on the basis that it is a representative sample for the whole country of Zimbabwe. The respondents were carefully chosen from all the 10 provinces of Zimbabwe. Therefore any conclusion drawn from this data is likely to be applicable to all the provinces of Zimbabwe. The total number of respondents in the 1999 survey was 8,516. In the interviewed households, 6,208 eligible women were identified and of these, 5,907 were interviewed, yielding a response rate of 95%. In a 50 percent subsample of households, 2,970 eligible men were identified, of which 2,609 were successfully interviewed (88 %response). The principal reason for nonresponse among both eligible men and women was the failure to find them at home despite repeated visits to the

household. The lower response rate among men than among women was due to the more frequent and longer absences of men.

A representative probability sample of 10,800 households was selected for the 2005-06 ZDHS. All women age 15-49 and all men age 15-54 who were either permanent residents of the households in the 2005-06 ZDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. A total of 10,752 households were selected for the sample, of which 9,778 were currently occupied. The shortfall was largely due to some households no longer existing in the sampled clusters at the time of the interview. Of the 9,778 existing households, 9,285 were successfully interviewed, yielding a household response rate of 95%. In the interviewed households, 9,870 eligible women were identified and, of these, 8,907 were interviewed, yielding a response rate of 90%. Of the 8,761 eligible men identified, 7,175 were successfully interviewed (82 percent response rate).

All the female respondents fall within the reproductive age group 15-49 years in both surveys. However with men, the 2005/6 survey covered men aged 15-54 years and the 1999 covered those aged 15-49 years. Thus the researcher used the 15-49 age range in both surveys during the analysis of results. The survey was carried out in all the 10 provinces of Zimbabwe that is Harare, Bulawayo, Midlands, Manicaland, Masvingo, Mashonaland West, Mashonaland Central, Mashonaland East, Matebeleland North and Matebeleland South.

3.2 STUDY DESIGN

A triangulation of quantitative and qualitative research techniques was used to gather the data from males and females in the reproductive age group. The study involved an assessment of the determinants of HIV and AIDS among reproductive age groups in Zimbabwe using quantitative secondary data gathered by the Central Statistics Office (CSO). These data were gathered and presented in the Zimbabwe Demographic and Health Surveys of 1999 and that of 2005/6 . These data sets have been selected in order to assess the patterns and changes regarding the determinants of HIV infection among reproductive age groups between the two selected surveys.

3.3 RESEARCH METHODS AND INSTRUMENTS

3.3.1 Survey

The research utilized quantitative secondary data gathered by the Central Statistics Office (CSO) which was presented in the Zimbabwe Demographic Health Surveys of 1999 and that of 2005/6. Surveys were used as a major research method and all the two ZDHSs used the questionnaire. It was administered on face to face basis by trained individuals to make sure that each respondent was asked exactly the same way as others. This was also done to avoid the inconveniences associated with postal distribution of questionnaires especially in the light of poor postal system in rural areas. The questionnaires were coded at the design stage for easy data analysis. The questionnaire was chosen on the basis that it is cheap and can accommodate large samples.

3.4 SAMPLING PROCEDURE

For the ZDHS, all respondents from the 1999 survey and only female respondents from the 2005/6 were aged between 15- 49, years and only men from the2005/6 were aged between 15-54 years. Sample sizes of 9,178 and 10,800 were arrived at and adopted in 1999 and 2005/6 surveys respectively. However the data was not collected from all the districts of Zimbabwe. The districts were randomly selected from the representative provinces. Thus, the sampling methodology produced a nationally representative sample. Some areas, by default, were included in the sample because of their accessibility and proximity to a targeted city or town.

3.5 Focus group discussions

Focus Group Discussions (FGD) were used for the qualitative study with the view of understanding of the selected populations' knowledge, beliefs, attitudes and practices regarding HIV and AIDS. FGDs allowed for the collection of richer and more detailed information than could be collected in the quantitative study. FGDs were conducted with both males and females in the reproductive age group 15-49 years and there were 8 groups. Each group had twelve participants and the discussions with each group took at least sixty minutes. The age and composition of the groups facilitated free discussions.

FGDs were conducted using a FGD guide which was carefully structured in order to enhance disclosure among participants. The discussions were started by explaining the purpose of the study and participants were assured of confidentiality in all they said during the discussions. Verbal consent was also sought before the discussions.

The FGDs aimed to be more than just a question and answer interaction and they gave group members the room to discuss the topical and sensitive issues among themselves, with the guide of a facilitator. In addition, FGDs draw upon participants' attitudes, feelings, beliefs and practices regarding HIV and AIDS. These attitudes, feelings and beliefs may be partially independent of a group or its social setting but are more likely to be revealed in a social gathering granted the interaction inherent in group discussions. The interaction within groups enabled participants to ask each other some questions which were not asked initially in the FGD guide.

3.6 DATA ANALYSIS

Quantitative analysis of survey data was done using the Statistical Package for Social Scientists (SPSS) version 11 by the CSO. This software facilitated frequency distributions to assess the determinants of HIV and AIDS among reproductive age groups in Zimbabwe. Frequencies and percentages were used in the initial stages of the data analysis. Descriptive statistics were used throughout the analysis. Frequencies indicate the prevalence of certain responses in different characteristics of respondents such as age groups and sex. Cross tabulations were used to show and test the relationship between dependent and selected independent variables respectively. Qualitative data from FGDs were analyzed using the thematic analysis**,** a qualitative analytic method for identifying, analysing and reporting patterns (themes) within data. Thematic analysis minimally organises and describes data set in (rich) detail. However, frequently it goes further than this, and interprets various aspects of the research topic. Thus, a theme captures

something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set.

3.7 RESEARCH ETHICS

Considerations of ethics are an inherent part of every phase of a researcher's life for both social and practical reasons. For this study, focus group discussions were only conducted after obtaining the full concert of all the participants and respondents. Respondents and participants were told the objectives of the study and assured that the data collected would be kept confidential and kept under lock and key. The participants and respondents were told that the study was not so much about their personal behavior but sought general and frank perceptions and opinions. The researcher was cognizance of the fact that exploitation of participants is unethical.

3.8 THEORATICAL FRAMEWORK

Several theoretical models on health behavior have been adopted, Becker (1974). An example is the Health Belief Model which was developed in the 1950s and it stipulates that people will change their behavior depending on their knowledge and attitudes. The model further asserts that the likelihood of an individual engaging in a particular behavior is determined by his/her perceptions of threats of an illness and the benefits incurred in following a particular course of action. Wekwete and Madzingira (2008) postulated that when relating to HIV and AIDS, the decision to adopt preventative behavior will depend on (i) the individual's perception of susceptibility to HIV and AIDS, (ii) the extent to which HIV and AIDS is seen to be a problem, (iii) barriers to behavioral change, and (iv)

perceived benefits of behavioral change or perceived action. Thus if an individual perceived himself to be susceptible to HIV and AIDS and that the consequences are serious he will take measures to prevent it.

However the theory assumes rational decision making and does not account for health related behaviors people perform without considering the costs and benefits. Thus the HBM does not take into account the essence of adolescence sexual risky taking. It may be true in some women in Africa that they engage in sexual relationships due to economic constrains but reality say people enter into sexual relationships for non economic reasons. As a result the shortcomings of the HBM were countered by other theories to cater for the social norms and the role that is played by the other significant others.

3.9 STUDY LIMITATIONS

The data gathered using the questionnaire method by ZDHS was mainly quantitative data leaving no room for qualitative issues about HIV and AIDS to be analysed in the research. Thus, the lack of qualitative information on the two DHSs prompted the researcher to further carry out the study using Focus Group Discussions. FGDs enhance the study since respondents can freely show their opinions, attitudes and feelings.

Some of the variables i.e. the determinants of HIV and AIDS are covered in one ZDHS and may not be available in the other ZDHS. Thus comparison during analysis was made difficult.

CHAPTER FOUR

FINDINGS OF THE STUDY

4.0 Introduction

This chapter is a presentation of the study findings. Descriptive statistics such as frequencies, percentages and graphs are used in data presentation. Several measurements of vulnerability such as condom use, age at first sex, paid sex, premarital sex, number of partners among others, are discussed against different demographic variables such as age, sex, marital status, residence and level of education. Comparative analysis will use the 1999 and 2005/6 ZDHS.

The chapter begins by discussing the socio economic and demographic characteristics of the respondents in both surveys. It discusses the sexual behavior of women and men among the reproductive age group with the view of determining any changes in the determinants of HIV and AIDS between the two surveys.

4.1 DEMOGRAPHIC AND SOCIAL CHARACTERISTICS OF THE RESPONDENTS

The samples are fairly gender balanced; however, the distribution comprises more males 52%, in 1999 compared to 2005/5, 49% (Table 4.1). Respondents in 2005/6 are much younger than those of 1999. For instance, while the 15-19 year age group comprised 20% of the sample, in 1999, it comprised 32% of the sample in 2005/6. Thus, about 37% and 52% comprised the 15-24 year age groups in 1999 and 2005/6, respectively. It is interesting to note that although the population in 2005/6 is much younger than the 1999,

marriage is higher in 2005/6 compared to 1999. For instance, while 34% of the sample reported that they were married in 1999, this compares to 38% in 2005/6. Consistently, the proportion reporting never marrying is higher in 1999, 51%, compared to 2005/6, 49%. Divorce rates are higher in 1999 than in 2005 with 7% and 3% in 1999 and respectively. Widowhood is fairly comparable, albeit slightly higher in 1999 (6%), than 2005/6.

Urbanization has not changed much, the proportion living in urban areas is about 50% in both surveys. Levels of education have also improved between 1999 and 2005/6. For instance, although the proportion reporting up to primary school is almost comparable, 24%, the proportion reporting secondary education is much higher in 2005/6, 78% compared to 66% in 1999. Tertiary education is higher in 1999, 10%, compared to 8% in 2005/6. This might be explained by the fact that the 2005/6 sample is younger.

Table 4.1 Percentage distribution of demographic and social characteristics of respondents

Demographic and socio variables		% of respondents	
		1999	2005/6
Sex	**Males**	51.8	49.3
	Females	48.2	50.7
	Total	**100**	**100**
Age (years)	15-19	20.0	31.6
	20-24	16.7	20.2
	25-29	27.2	18.0
	30-34	12.9	11.9
	35-39	8.6	9.0
	40-44	5.7	5.1
	45-49	3.8	3.2
	Total	**100**	**100**
Marital Status	Married	34.0	38.4
	Never married	51.0	49.1
	Widowed	6.6	5.7
	Divorced	7.3	2.9
	Separated	1.1	2.3
Place of residence	Urban	49.6	49.7
	Rural	50.4	50.3
	Total	**100**	**100**
Education	None	1.9	1.6
	Primary	22.2	13.7
	Secondary	65.6	77.5
	Tertiary	10.4	7.5
	Total	**100**	**100**

Polygyny

Polygyny is the practice of having more than one wife. It has implications on the frequency of exposure to sexual activity, therefore an important variable in HIV and AIDS analysis. The extent of polygyny in Zimbabwe was measured by asking all currently married female respondents: “Besides yourself, how many other wives does your husband have?” Table 4.2 shows the number of wives for married men by background variables.

For the period under study, the majority of married women were in monogamous unions (84 percent in 2005 and 85 percent in 1999); while 11 percent (2005/6) and 15 percent (1999) were in polygamous unions. Between 1999 and 2005, polygyny declined by 4 percentage points, and the proportion of women in monogamous unions also declined by 1 percentage point. Rural women are almost three times as likely to be in polygamous union as their urban counterparts (15 % for rural areas compared to 5 % for urban areas in 2005, and 7 % for rural areas compared to 20 % for urban areas in 1999).

For any country on the road to modernization, there exists an inverse relationship between education and polygyny; and Zimbabwe is no exception. A higher proportion of women without formal education reported being in unions with co-wives, compared to women with higher education. The proportion of women without formal education in polygamous union declined from 29 percent in 1999 to 28 percent in 2005, while the proportion for those with higher education declined from 5 percent in 1999 and 2 percent in 2005. However, the proportion of women in polygamous unions declined in all

education level categories between 1999 and 2005, with highest decline of 4 percentage points in the primary education category; and least decline of 1 percentage among those with no education.

Table 4.2 Number of Co-wives

	1999					2005/6				
Residence	**0**	**1**	**2+**	**Missing**	**Total**	**0**	**1**	**2+**	**Missing**	**Total**
Urban	92.4	6.7	0.6	0.3	100.0	89.0	3.7	1.3	6.0	100.0
Rural	80.0	14.7	5.1	0.2	100.0	81.4	9.1	5.6	3.9	100.0
Total	84.5	11.9	3.5	0.1	100.0	83.9	7.2	4.2	4.7	100.0
	1999					2005/6				
	0	**1**	**2+**	**Missing**	**Total**	**0**	**1**	**2+**	**Missing**	**Total**
No Education	69.8	20.2	9.2	0.8	100.0	67.7	19.2	9.1	4.0	100.0
Primary	81.6	14.0	4.2	0.2	100.0	81.4	8.6	6.1	3.9	100.0
Secondary	89.8	8.4	1.7	0.1	100.0	86.9	5.5	2.7	4.9	100.0
Higher	95.1	4.9	0.0	0.0	100.0	90.2	1.5	0.0	8.3	100.0

Median age at first marriage

Results from the 1999 and 2005/6 surveys revealed that the median age at first marriage in Zimbabwe was 19 years among women aged 20-49 years, meaning it never changed since 1999 (Table 4.3). Among women aged 25-49 years, the median age at first marriage remained 19 years again in both surveys. However, for males in the 20-49 age group, the median age at first marriage was 25 years in the 1999 survey while in 2005/6 it was 24years. Generally, among women, the median age at first marriage was higher than males in both surveys. Thus, results indicate that men were getting married at a later age as compared to their female counterparts

Table 4.3 Median age at first marriage among males and females in 1999 survey

	F	M	F	M	F	M	F	M	F	M	
Current age	15		18		20		22		25		
15-19	1.9		NA	NA	NA	NA	NA	NA	NA	NA	
20-24	4.6	14.0	28.7	26.9	52.9	8.1	NA	NA	NA	NA	
25-29	6.5	14.0	30.1	26.7	52.3	12.7	71.0	29.8	85.4	57.1	
30-34	5.9	12.1	28.0	27.3	54.1	10.3	68.7	27.0	85.3	55.8	
35-39	8.7	14.0	40.5	33.7	65.3	12.3	78.2	29.7	89.4	53.1	
40-44	11.4	12.6	39.4	26.3	62.3	14.7	80.1	27.9	90.0	51.3	
45-49	8.8	6.2	37.1	18.6	61.4	18.1	78.8	3.5	85.7	63.0	
50-54		6.2		18.6		53.8		79.6		89.9	Median age= 24.5
20-49	6.8		32.4		56.5		71.9		82.5		Median age= 19.4
25-49	7.8		33.9		57.8		74.2		82.5		Median age= 19.3

Table 4.4 Median age at first marriage among males and females in 2005/6 survey

	F	M	F	M	F	M	F	M	F	M	
Current age	15		18		20		22		25		
15-19	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	
20-24	4.6	0.2	33.6	2.4	56.0	8.1	NA	NA	NA	NA	
25-29	5.4	0.3	29.4	3.6	54.1	12.7	73.1	29.8	86.6	57.1	
30-34	9.4	0.3	33.3	3.3	56.8	10.3	74.3	27.0	87.5	55.8	
35-39	8.0	1.0	31.9	7.4	52.7	12.3	71.5	29.7	84.6	53.1	
40-44	9.3	0.2	43.2	5.2	67.4	14.7	81.6	27.9	91.3	51.3	
45-49	10.4	1.1	38.0	5.6	64.3	18.1	80.1	3.5	91.5	63.0	
20-49	7.0		33.8		57.7		71.9		82.5		Median age= 19.4
25-49	7.9		33.9		57.7		75.2		87.7		Median age= 19.3
25-54		0.5		4.7		12.8		29.1		55.9	Median age= 24.3

Age at first sexual intercourse

The median age at first sexual intercourse was higher for males than females in both surveys. In both surveys, the median age at first sex among women aged 20-49 remained constant, at 19 years while for males it was 20 years (Table 4.5, 4.6). The decline in the mean age at first sexual encounter also means that despite the availability of information on abstinence, people are increasingly having sex at an increasingly younger age. The

decline in the age at first sex between 1999 and 2005/6 also reflects early marriages among women as already hinted above.

Zimbabwean men begin sexual intercourse at a later age than women as reflected in both surveys. Among men aged 25-49 years, the median age at first sexual intercourse was 20 in the 1999 survey and again 20 in men aged 25-54 in the 2005/6 survey. In 1999, 4% of men had sex by age 15 years while in the 2005/6 survey it was 3%, a slight decrease. The mean age at first sexual encounter among males was high in the1999 survey as compared to the 2005/6 survey. The mean age at first sex declined from 20 years in 1999 survey to 19 years in 2005/6 survey. This trend shows an increase in the vulnerability to HIV/AIDS as people became sexually active at an earlier age with time.

Similar results were also found in FGDs, where young girls aged 19 to 23 years unanimously agreed that they are having sex at an increasingly younger age because of poverty, lack of knowledge and guidance by family members, peer pressure and sexual coercion.

Table 4.5 Age at first intercourse among women and men in 1999

	F	M	F	M	F	M	F	M	F	M	
Age	15		18		20		22		25		Median Age
15-19	3.2	6.3	NA	NA	NA	NA	NA	NA	NA	NA	a
20-24	5.3	7.5	35.0	30.7	63.1	56.5	NA	NA	NA	NA	a
25-29	6.6	5.3	33.2	30.5	60.2	62.3	76.6	77.4	86.2	89.9	19.1
30-34	7.6	5.0	35.3	26.5	58.4	52.6	74.4	72.6	83.4	87.3	19.1
35-39	9.4	3.1	49.9	29.4	72.0	54.5	81.9	74.9	87.1	88.1	18.0
40-44	11.6	3.6	45.3	23.3	69.6	48.3	82.5	65.2	88.1	84.5	18.4
45-49	8.2	3.2	43.2	31.6	65.3	51.6	79.2	68.4	82.9	86.0	18.5
50-54	--	2.2	--	18.0		30.4	--	63.2	--	81.0	--
20-49 (F)	7.4		38.5		63.9		77.4		83.7		18.8
25-54 (M)		4.2		27.8		53.5		72.2		87.2	19.7

Table 4.6 Age at first intercourse among women and men in 2005/6 survey

	F	M	F	M	F	M	F	M	F	M	
Age	15		18		20		22		25		Median Age
15-19	4.9	5.2	NA	NA	NA	NA	NA	NA	NA	NA	a
20-24	5.8	3.6	37.0	26.2	65.7	54.4	NA	NA	NA	NA	19.7
25-29	6.8	3.6	38.2	25.3	61.6	50.2	78.3	70.4	89.3	87.4	20.0
30-34	8.5	2.4	38.4	22.2	62.8	45.2	79.1	67.1	87.2	83.8	20.3
35-39	10.3	2.8	42.4	20.9	65.4	46.8	80.8	67.2	88.9	81.8	20.2
40-44	9.9	3.1	51.3	19.1	78.1	42.2	88.6	65.5	93.9	79.5	20.5
45-49	12.3	3.1	49.6	21.1	72.6	44.7	85.5	71.0	91.2	85.2	20.3
50-54	--	3.2	--	23.4		46.8	--	NA	--	NA	a
20-49	8.0	3.2	40.8	23.5	66.1	48.9	NA		NA		18.6

Payment of sexual intercourse by year

Payment for sex has contributed largely to the spread of HIV infection, however it declined between the two surveys. For instance the 1999 survey had 3% of men in the age group 15-19 years who paid for sexual intercourse while only 1% of men in the same age group in the 2005/6 survey reported paying for sex (Table 4.7). In addition, results show that 10% of men paid for sex in the 1999 survey while 6% paid for sex in the

2005/6 survey. Paid sex was reported to be high among men in urban areas as compared to those in rural areas. Results show that 8% of men paid for sex in 1999 in rural areas only 4% paid for sex in 2005/6 in urban areas. In rural areas, 6% of men paid for sex in 1999 and 4% did the same in 2005/6.

Payment for sex also varied with education; however trends show that as one acquires better education it decreases. For instance 7% of men with primary education paid for sex in the 1999 survey and the proportion decreased to 4% in the 2005/6 survey. Generally, payment for sex decreased preceding the two surveys for example 8% of men in urban areas paid for sex in the 1999 survey and the proportion decreased to 4% in the 2005/6 survey. Similarly, in rural areas, paid sex was high in 1999 as compared to the 2005/6 survey (8% and 4% respectively).

Table 4.7 Paid sex in the 1999 and 2005/6 survey

Age	% who paid for sex	
	1999	2005/6
15-19	3.0	1.1
20-24	9.7	6.2
25-29	9.5	5.6
30-39	4.4	4.0
40-49	8.3	3.9
50-54	2.7	--
Education Level		
No education	8.8	8.8
Primary	7.0	4.4
Secondary	6.9	3.6
Tertiary	--	3.6
Place of residents		
Urban	8.3	4.1
Rural	5.9	3.7

The same notion was substantiated by most FGD participants who remarked that since they do not have regular partners, they are left with no option other than sleeping around with any partner who agrees to quench their thirst.

Drunkenness during sexual intercourse

It might be expected that drinking, especially in excess, would be associated with risky sexual behaviour, namely non-use of condoms. Results from the 2005/6 ZDHS revealed that among men, condom use with any partner decreased with increased reported drinking (Table 4.8). However, this variable could not be compared to the 1999 survey since the 1999 survey had no data on this aspect. Table 4.8 shows that there is incresed condom use in men who had sex whilst drunk as compared to females for example in the 25-29 age group, 8% of males had sex while drunk and 7% reported using condoms. Among females, condom use during sex was low. For example while 3% of women had sex when drunk, 2% of them used condoms. Thus, risk perception among men is greater than that of women.

Condom use in males increased with age, for instance, the proportion of men who used a condom in the 20-24 age group was 4%, and it increased to 8% in the 30-39 age group . Therefore sex while drunk is a risk factor for the transmission of HIV infection as there is a higher likelihood of having unprotected sex. Unfortunately the 1999 ZDHS could not report anything about drunkenness during sexual intercourse, thus comparison in this case was made difficult.

Similar sentiments were also echoed during the FGDs that men tend to be very negligent about their healthy when it comes to drinking and sexual intercourse. One 38 year old man noted:

> *"Sometimes it is hard to think of a condom when you have just fallen for a well built lady. Immediately when she says yes we can have time together, then you have to take action quickly before invasion by others. In that case there is no need to take too many precautions"*

Table 4.8 Drunkenness during sexual intercourse (2005/6 survey)

Background characteristics	Drunkenness during sexual intercourse among youth females and males 15-24			
	% who had sex when drunk		% who used a condom when drunk	
Age	Females	Males	Females	Males
20-24	2.7	5.1	1.5	4.4
25-29	2.3	7.7	4.6	6.7
30-39	0.6	7.9	1.3	7.7
40-49	0.3	8.9	1.3	8.3

Intergenerational sexual relationships

Intergenerational sex poses great risk to the reproductive age groups. There was a marked decrease in intergenerational relationships in 2005/6 survey as compared to the 1999 survey. For instance, in the 1999 survey, the proportion of females who reported having a sexual partner who is ten or more years older than the respondents' age was 27% and the proportion decreased to 4% in the 2005/6 survey. For men, the proportion who reported having a partner who was 20 years older was 11% in the 1999 survey and the proportion decreased to 2% in the 2005/6 survey (Table 4.9). This clearly shows that

intergenerational sexual relationships among the reproductive population do exist with females more likely to have older sexual partners than males. However, it is interesting to note that the percentage of respondents ever had a sexual partner who is ten or more years the respondent's age in the past 12 months preceding the survey significantly declined between 1999 and 2005/6 from 60% to 19%, respectively.

A substantial proportion of females in age groups 25-34 years in the FGDs highlighted another reason which is almost close to intergenerational relationships. They mentioned concurrent sexual relationships (concurrency) and these are sexual relationships that overlap in time. Concurrency has emerged to be an important factor driving HIV transmission. Sexual relationships are becoming more rampart, more sexual networks are evolving hence the development of high HIV viral load which increases likelihood of HIV transmission, the virus can be passed on more rapidly to members within the network. Participants were asked whether HIV is still a problem in the society. They agreed that HIV is still a problem in the society by mentioning the issue of concurrent relationships.

Table 4.9 Intergenerational sexual relationships

Sex of respondents	Ever had a sexual partner with 10 or more years than the respondents' age	
	(1999)%	(2005/6)%
Females	27.2	4.3
Males	10.7	2.2
Total	**37.9**	**6.5**

It was noted during FGDs that education was associated with application of prevention strategies, as the more educated men adopted a wide variety of actions. These included having sex with only one partner, using condoms consistently (every time when having sex), using condoms more often, reduce number of partners, changing the way of selection of sex partners and not sharing needled or razor blades. Women had less of a range of strategies compared with men. Nearly half of the women reported that they were having sex with one partner and a few had HIV test. While education also had an effect on the strategies chosen, its influence was less pronounced as compared with the men. However women with more than secondary education were more likely to use condoms more often as well as use condoms every time they have sex compared to those with primary or no education at all.

Number of sexual partners

Men and women with 2 or more sexual partners in the two surveys were at high risk of contracting HIV. The 1999 ZDHS' findings concentrated on the currently married and unmarried partners by age while the 2005/6 gave a general look by age (Tables 4.10, 4.11). Among currently married men and women in the 1999 ZDHS, having multiple partners is not closely tied to age although there is a tendency among married men for extramarital activity to diminish with age. Only 1% of women who were currently married and those who were not married had two or more partners in the 1999 survey. Number of sexual partners decreased with age in those who were currently married in 1999 survey, i.e. from 1% in the age group 15-19 to 0.4% in the age group 40-49. In 1999, 46% of the currently married men reported having 2 or more partners and the

proportion decreased to 10% among men aged 50-54years. However, among the unmarried men, the 15-19 age group comprised of 4% and the proportion increased with age to 26% in the 40-49 age group in the 1999 survey.

In the 2005/6 survey, 3% of women in the age group 15-19 reported having 2 or more sexual partners and the proportion decreased with age to 1% in all the other age groups (20-49). With men, 22% of those aged 20-24 years reported having two or more sexual partners followed by the 15-19 age group with 15%. However, the proportions decreased with age i.e. to 10% in the 40-49 age group. Generally, the proportion of males who reported having two or more sexual partners was higher in the 2005/6 survey as compared to the 1999 survey. Extra marital relationships entail greater risk in today's environment which is highly infested with the HIV infection.

Table 4.10 Number of sexual partners' 1999 survey

Age	Currently married: 2+ partners		Unmarried: 2+ partners	
	Females	Males	Females	Males
15-19	1.1	46.3	0.8	4.1
20-24	1.6	21.6	5.2	19.0
25-29	0.6	16.6	5.7	24.4
30-39	0.3	10.0	5.7	19.2
40-49	0.4	13.7	4.5	25.5

Table 4.11 Number of sexual partners in the 2005/6 survey

Age	Percentage who had: 2+ partners	
	Females	Males
15-19	2.8	15.2
20-24	1.3	21.7
25-29	1.2	15.9
30-39	1.2	10.6
40-49	0.7	9.8

A substantial proportion of men in FGDs affirmed the primacy of husbands and many endorsed violence against women under certain circumstances. They tended to disagree that they could not control themselves when sexually aroused. It was unanimously agreed by both men and women that a woman should listen to her husband with very little variation by age, marital status and education level. Nearly two thirds of men agreed with the statement that "sometimes a man have a good reason to hit his girl friend or wife", an attitude that condones physical violence against women. Nearly three quarters of men agreed that if a woman knew that her partner was having sex with other women, she should be able to ask him to use a condom or refuse to have sex with him. However women expressed worry over the issue suggested by men mentioning that once she refuses to have sex with him then it means she will be thoroughly beaten for her refusal or she would have given the men another chance to graze around.

4.2 KNOWLEDGE ABOUT HIV/AIDS

Knowledge of ways to avoid HIV infection

Results from the 1999 survey show that 17% of women and 7% of men could not cite one way of avoiding HIV infection. For both men and women in the 1999 survey, the youngest and the oldest age groups had the least levels of knowledge about ways to avoid HIV infection. Only 6% of women and 2% of men reported that they do not know AIDS. Similarly 24% of women in the 40-49 age group and 15% of men in the 50-54 age group did not know a way to avoid AIDS. Unfortunately, the 1999 survey results about knowledge of AIDS and ways to avoid AIDS were not comparable between the 2005/6

and the 1999 surveys because the 2005/6 ZDHS did not have data on whether the respondents knew HIV and AIDS or not (Table 4.12).

Respondents' knowledge about HIV and AIDS was high in the 2005/6 survey as compared to the 1999 survey. In both surveys, respondents mentioned abstaining from sex as one way of preventing HIV. Less than 50% in the 1999 survey among both males and females reported that abstaining can be one method. For instance in 1999, the 40-49 age group reported the least percentage of 12% and 27% among females and males respectively whilst in the 2005/6 survey they reported 80% and 88% respectively. In a nut shell, responses in the 1999 survey were lower than those of the 2005/6 survey regarding abstinence. Knowledge about HIV being prevented by abstinence increased from 1999 to 2005/6.

Knowledge about condom use as a preventative method was high among the 2005/6 survey respondents as compared to the 1999 respondents. On preventive methods in the 1999 survey, women and men in the 15-19 age group reported the least knowledge about condom use as a way of preventing HIV with 59% and 73% respectively and the 40-49 age group had 53% and 70% among women and men respectively. A higher percentage of women and men aged 15-19 in the 2005/6 reported that condoms can prevent the spread of HIV. Results show that 67% of women and 76% of males reported that condoms can prevent the spread of HIV. However, the use of condoms as a preventative method yielded better results in both surveys among women in the 25-29 age group with the 2005/6 reporting 81% which is an increase from 74% reported in 1999. Among men

highest knowledge was reported by those in the age group 30-39 with 86% (2005/6) an increase from 76% reported in 1999.

Limiting sexual partners was also cited as one way of reducing the spread and contracting HIV and was higher in the 2005/6 survey respondents as compared to the 1999 survey respondents. In the 1999 survey, 63% of women and 69% of men cited that limiting the number of sexual partners was a way of preventing the spread of HIV. In the 2005/6 survey among age group 15-19, 77% of females reported that limiting sexual partners was another way of preventing the spread of HIV while males who reported the same constituted 81% a marked increase from the 56% that was reported in the 1999 survey. Generally, knowledge of preventative strategies was high in the 2005/6 survey compared to the 1999 survey.

4.12 Knowledge of ways to avoid HIV

Knows the following methods

Age	Does not know AIDS		Does not know a way of preventing AIDS		Abstinence				Use condoms				Limit sexual Partners			
					FEMALES		MALES		FEMALES		MALES		FEMALES		MALES	
	Females 1999	Males	Females 1999	Males	1999	2005/6	1999	2005/6	1999	2005/6	1999	2005/6	1999	2005/6	1999	2005/6
15-19	5.6	1.5	20.7	11.9	24.3	77.7	25.3	84.4	59.0	67.8	72.8	75.9	55.7	76.7	56.2	81.3
20-24	2.9	0.5	13.7	5.0	16.6	79.9	34.8	87.4	73.3	77.5	80.5	83.0	65.6	80.5	68.0	84.7
25-29	3.5	0.7	13.1	3.6	14.0	83.0	31.0	90.1	73.5	80.6	84.7	82.7	68.0	84.3	77.9	86.6
30-39	2.2	0.9	14.0	4.5	14.3	83.5	30.6	89.6	67.4	80.2	75.6	85.1	66.9	82.9	81.0	86.0
40-49	3.2	0.7	23.5	8.4	11.5	79.6	27.4	87.7	52.7	73.6	69.7	82.5	60.6	80.4	69.7	87.6
50-54		0.9		7.4				29.7				63.6				64.0
Total	3.5		16.8		16.8				65.6				63.2		69.0	

In most FGDs with both men and women results show that there were variations in responses regarding condom source, use and all other prevention methods. Most respondents mentioned abstinence as the best measure. Condom use was mentioned by most participants across all age groups. However male circumcision was not common

across all age groups. Participants reported that the prevention methods should not work as single entities. One male participant mentioned that:

> "*Abstinence is the best method of HIV prevention but for those who would have failed to abstain they must be able to use condoms correctly and consistently"*

4.3 ATTITUDE TOWARDS HIV AND AIDS

Attitudes towards caring for a relative with HIV and AIDS

There is a marked decrease in respondents' attitudes towards caring for relatives with HIV among males than females. Respondents were asked their opinions if they were willing to take care of a relative who is HIV positive. Ninety one percent of women in the age group 30-39 in the 1999 survey agreed that they were willing to take care of a relative who is HIV positive while in 2005/6, 93% of females reported the same. In the 1999 survey, 92% of males reported that they were willing to take care of a relative with HIV and AIDS. The proportion deceased to 77% among men of the same age group in the 2005/6 survey. This shows that female respondents in the 2005/6 survey were more understanding and more willing to take care of a relative who was HIV positive as compared to those in the 1999 survey. Males in the 1999 survey were better caring for a relative who was HIV positive as compared to those in the 2005/6 survey.

The proportion of males and females who reported that they will not keep a secret that a family member is HIV positive was high in 1999 survey as compared to the 2005/6 survey. For example, while 63% of females in the age group 15-19 reported that they

would not keep a secret that a family member is HIV positive, 52% reported the same in the 2005/6 survey. Among men in the 20-24 age group (1999 survey), 66% reported that they would not keep a secret that their relative is HIV positive while in 2005/6 only 46% of males reported the same (Table 4.13).

Social aspects of HIV prevention increased with levels of education in both surveys. However, the proportions were high in the 2005/6 survey as compared to the 1999 survey. The 1999 survey revealed that 49% of women with no education agreed that persons with HIV should not keep their status private while in the 2005/6 survey the proportion increased to 63%. Thus, levels of education contributed much in determining one's opinion over disclosure of HIV status. Respondents from the 1999 survey who agreed that a person with HIV should not keep status private were more than those from the 2005/6 survey.

4.13 Social aspects of HIV prevention 1999 survey

	Willing to care for a relative with HIV				Would not keep secret that a family member is HIV positive			
	Females		Males					
Age	1999	2005/6	1999	2005/6	(F)1999	2005/6	(M)1999	2005/6
15-19	82.8	87.4	86.7	60.6	62.3	51.5	64.6	59.6
20-24	86.0	90.4	88.3	69.9	58.9	46.9	66.4	45.9
25-25	88.8	93.8	86.6	76.3	59.9	46.6	61.3	37.7
30-39	9.2	92.5	91.8	76.8	54.9	45.5	62.8	38.3
40-49	90.4	92.2	88.8	78.8	52.5	52.2	61.8	39.1
50-54				89.7				64.8
Education Level								
No education	85.4	70.5	91.3	71.3	48.6	62.9	38.7	52.3
Primary	86.3	90.6	86.0	63.0	41.5	57.4	33.5	58.1
Secondary	88.6	91.4	89.4	73.1	33.7	45.0	32.8	42.2
Tertiary		88.7		80.0		30.4		31.5

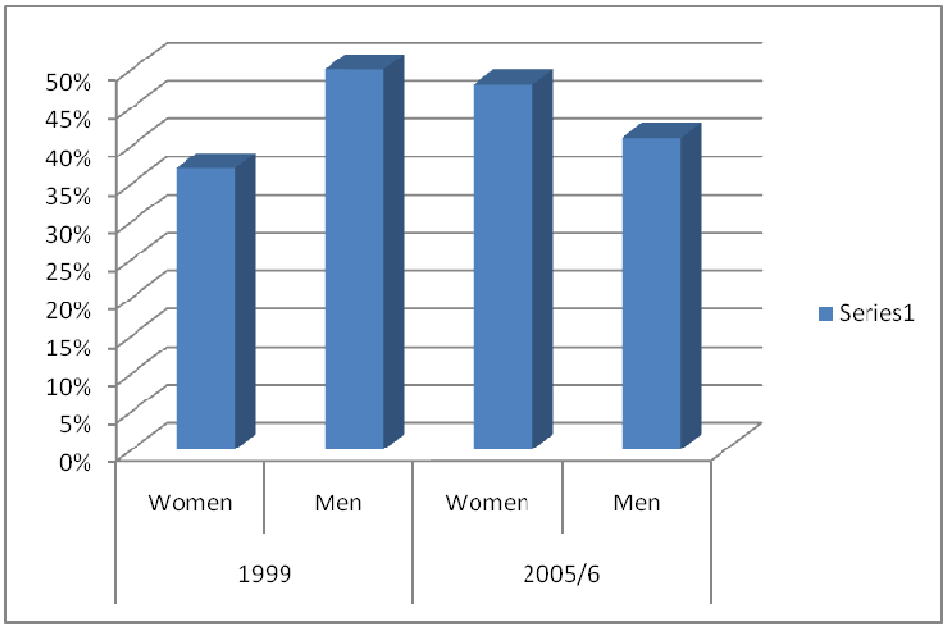
It was unanimously agreed in all FGDs that the status of an HIV positive relative should not be kept as a secret. Reasons highlighted were that, at some point in time the HIV positive individual may need societal assistance therefore it becomes easy to seek and get the assistance since everyone knows that person's status.

Attitudes towards condom education

Condom use is one of the main strategies for combating the spread of HIV. ZDHS respondents were asked if they thought that children aged 12-14 years should be taught about using a condom to avoid HIV. Attitude towards condom education among children aged 12-14 years was high in 1999 survey as compared to the 2005/6 survey. The results show that 50% of men accepted the idea while 37% of women constituted in 1999. In the 2005/6 ZDHS, results showed that 48% of women and 41% of men support condom education for the 12–14 years age group. Generally, males in both surveys supported the idea of condom education as compared to females (Figure 4.1).

However, educating youth about condoms was found to be controversial, with some saying it promotes early sexual experimentation. A substantial proportion of respondents in FGDs among age groups 25-39 years mentioned that condom education should be available to children after the age of 12 years. Major reasons provided were that these children will grow with the idea of protecting themselves form the pandemic. They also considered the issue of early sexual debut and early marriages, and they posited that children should be taught about condom use to reduce chances of contracting the HIV virus.

Figure 4.1 Attitude toward condom education.



Knowledge of various AIDS related issues.

Commonly, people have certain misconceptions about HIV and healthy looking persons. Normally people believe that a healthy looking person cannot be HIV positive. However results from the two surveys revealed that the majority of people were aware that a healthy looking person could be HIV positive. Eighty-one percent of women aged 30-39 reported that a health looking person can be HIV positive and 87% of men in the same age group reported the same. In the 2005/6 survey, 89% of women in the age group 25-29 reported that a health looking person can be HIV positive while 93% of men in the same age group reported the same (Table 4.14). Generally, more women and men from the 2005/6 survey reported that a health looking person can be HIV positive as compared to men and women from the 1999 survey.

More respondents in urban areas agreed that HIV can be transmitted through breast feeding as compared to those in rural areas. When asked whether HIV can be transmitted from mother to child, 90% of women in urban areas agreed and while 83% in rural areas agreed too. Similarly, 90% of men in urban areas agreed to the same statement while 85% of men in rural areas did the same (1999 survey). In the 2005/6 survey, 82% and 81% of women and men, respectively in urban areas agreed to the statement. In rural areas, 78% and 80% of women and men respectively, agreed that HIV can be transmitted from mother to child by breast feeding.

4.14 Knowledge of various HIV and AIDS related issues

	Can a health looking person be HIV+				Can HIV be transmitted through breast feeding			
	Females		Males		Females		Males	
Age	1999	2005/6	1999	2005/6	1999	2005/	1999	2005/6
15-19	68.6	81.0	80.9	85.0	28.7	6	32.0	76.5
20-24	79.1	86.6	84.9	93.3	37.3	72.0	40.0	80.1
25-29	78.5	89.1	90.4	92.5	37.0	81.2	35.7	80.5
30-39	81.4	88.4	87.0	95.4	32.4	84.0	42.1	83.1
40-49	70.7	86.4	87.1	93.9	29.0	84.2	32.6	80.9
50-54				80.9		79.7		24.9
Residence								
Urban	86.5	91.7	93.0	96.2	89.5	80.5	89.9	82.1
Rural	69.0	81.9	79.7	88.2	83.0	79.6	85.2	78.4

Voluntary Testing and Counseling

Respondents were asked whether they know where they can be tested for their HIV status. There was an increase in respondents' knowledge concerning the places where they can be tested. In the 1999 survey, 34% of women in the age group 15-19 knew where to get tested while 255 of the same age group in males reported the same. In the

2005/6 survey, 65% of females in the age group 15-19 had knowledge concerning the places where they can be tested while 61% of their counterparts reported the same. Thus, respondents' knowledge on where they could be tested was high in 2005/6 as compared to the 1999 survey (Table 4.15).

Knowledge of where one could be tested also varied with places of residence with 45% of women in urban areas and 22% in rural while men reported 13% in urban areas and 6% in rural areas (1999 survey). In the 2005/6 survey 88% of women in urban areas and 66% of women in rural areas knew where they could be tested, while with men the proportions where 91% of those in urban areas and 63% of those in rural areas. Generally, males and females in urban areas had high knowledge pertaining to where they could be tested as compared to those living in rural areas.

Table 4.15 Testing for HIV and AIDS

	Who know where to get tested (1999)		Who know where to get tested (2005/6)	
Age	Females	Males	Females	Males
15-19	33.8	24.6	65.4	60.8
20-24	40.2	32.5	80.6	79.4
25-25	52.1	41.1	79.3	82.8
30-39	39.2	39.0	79.0	80.8
40-49	32.8	31.1	69.1	73.4
50-54	--	35.3	--	--
Residence				
Urban	44.9	41.8	88.3	90.6
Rural	21.7	27.9	65.9	63.3

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter covers the summary of findings, discussion of results and the recommendations based on the findings.

5.1 SUMMARY OF FINDINGS AND DISCUSSION OF THE RESULTS

The study revealed that more respondents were in the age ranges 15-24 years in both surveys and among both males and females. The 15-19 age group comprised more participants as compared to the 20-24 and all other groups that follow. Twenty seven percent of males participated in both surveys while 25% of women were in the 1999 survey and a decrease to 24% in 2005/6 was noticed. Generally the two surveys revealed that there were more respondents in rural areas as compared to those in urban areas and among those in rural areas there were more males than females in both surveys, 61% and 58% respectively in the 1999 survey while the 2005/6 survey reported that 60% of both sexes who participated in the survey resided in rural areas. The trend is vice versa in rural areas with more females and less males in both surveys. This confirms the general estimate that most Zimbabwe's population resides in rural areas and the reason for more males in urban areas was attributed to the fact that they are the husbands who are employed in town while women are engaged in agriculture in the rural areas.

The study revealed that the majority of respondents had attained secondary education in both surveys although there was a significant difference between males and females. There was an increase in education attainment in both sexes from 1999 to 2005/6. In 1999, 50% of females reported that they had secondary education and the proportion increased slightly by 10% in 2005/6. In 1999, the proportion of men with secondary education increased from 60% in the 1999 survey to 65% in 2005/6 survey. In a track survey by Population Services International (PSI) (2006), the majority of the respondents had attained secondary education though more males (61%) than females (51%) reported to have attained secondary education.

The study also revealed that women dominated in the lower education levels, that is, primary and no education at all. The results reflected that the education system in Zimbabwe is accessible and affordable. The major reason for those who failed and who never reported to school was attributed to their negative attitude towards learning, shortage of resources and encouragement. Such a better educational background leaves men with an ability to deal with RH problems and challenges since they may be self sufficient and enlightened.

Generally the study revealed that the mean age at first sexual encounter decreased from about 20 years in 1999 to about 19 years in the 2005/6 survey. Results show that females initiate sexual intercourse at an earlier age as compared to their male counterparts. These findings were a further decline from the ones reported by the PSI in 2006. The PSI reported that the mean age at first sexual encounter was 21 years among females and 22

among males. The decline in the mean age at first sexual encounter means that people are having sex at an increasingly younger age. This places them at the highest peak of infection since they indulge in sexual intercourse at a tender age.

There is a universe relationship between education and polygamy. Women with no education at all reported the highest percentage of getting involved in polygamous unions although there was a marked decline from 50% in the 1999 ZDHS to 27% in the 2005/6 ZDHS. Similarly, in a study by Moyo, (2001), education and polygamy were strongly related. The study revealed that 61% of women without education were involved in polygamous unions as compared to women with higher and tertiary education. Similarly, men with secondary and tertiary education were more likely to marry two or more wives as compared to those with higher and tertiary education.

The median age at first marriage in Zimbabwe among females aged 20-49 years was 19 years in both surveys and overall 58% of women in Zimbabwe in both surveys age 20-49 years were married by age 20. With men, the age at first marriage was higher i.e. 25 years in those aged 25-54 and 20 years in those respondents aged 20-49 years. Overall, men married at a later age compared to women. A study by Chiroro P and Muhwava (2002), made the findings that generally all men marry at a much later age as compared to their female counterparts. The study revealed that 66% of females got married at the age of 20 years yet only 18% of males married at the same age.

Payment for sex was high in 2005/6 than in 1999. Men aged 20-29 years and those aged 40-49 years reported the highest proportion of paid sexual intercourse. Men aged between 40-49 years were mostly sugar daddies. Nine percent of men with no education paid for sex while only 4% was reported by those with secondary and tertiary education. In a study by Chiroro et al (2002) revealed similar results that 61% of males with no education paid for sex as compared to 21% with at least secondary education.

Less than half (40%) of female youths in age group 15-24 had knowledge about HIV and AIDS while 46% in male youths reported the same (1999 survey). However, the 2005/6 survey reported that knowledge about HIV and AIDS increased among youths aged 15-24 years. The proportions were 81% and 86% among females and males respectively. In a study by Jackson and the one by Mhloyi et al 1999, 77% and 86% of youths in the age group 15-24 had comprehensive knowledge about HIV and AIDS.

Comprehensive knowledge about HIV and AIDS tends to increase with levels of education in both sexes. Women with primary education had a comprehensive knowledge about HIV and AIDS of 30% in 1999 survey and increased to 60% in 2005/6 survey to those with more than secondary education. Same applies in men with 33% of those with primary education reporting knowledge while 65% of those with secondary education reported the same. These results confirm the findings by Jackson, (2002) that as people attain more education their scope of reasoning and action also increases.

Knowledge of a source of a condom was higher among urban than rural residents. Knowledge about condom source among women increased from 66% in 1999 ZDHS to 76% in 2005/6 ZDHS. The same applies with men, knowledge of condom source increased from 71% in 1999 survey to 77% in the 2005/6 survey. Similar results were also obtained in a study carried out by Jackson (2002) which revealed that all sexes in urban residents know of a condom source and even how to use them. However rural residents have little knowledge about the source, 42% among males and 26% among females. This can be attributed to societal culture and values; for instance, if a teenager is seen purchasing some condoms the society would call that teenager a prostitute.

Intergenerational sex was associated with the spread of HIV. Among females, intergenerational relationships sharply decreased from about 37% in the 1999 survey to around 11% in the 2005/6 survey. In the 1999 ZDHS, males reported about 20% intergenerational relationships and such relationships declined to about 7% in the 2005/6 ZDHS. More women reported having sexual partners ten or more years older their age. In a similar study by WHO (2007), it was noted that intergenerational sex was associated with the spread of HIV. It was remarked that it is very unfortunate that many people despite having information on HIV and AIDS still reported approval of cross generational sex. Intergenerational sex gives less room for the younger partner, especially women, to negotiate safe sex thereby increasing their vulnerability to the HIV infection. In most cases their older sexual partners are the ones who decide when, where and how to have sex.

The number of sexual partners one has is an important determinant of STIs including HIV and AIDS. The higher the number of sexual partners, the greater the chances of contracting HIV and other sexually transmitted diseases. A significant proportion of unmarried women (6%) and men (46%) reported engaging in sex with more than one partner in the 1999 survey while in 2005/6 survey the results were 22% and 51% respectively. This proportion was higher than the 11% for females and 38% for males as reported by Chids and Williams (1996). Muhwacha (1998) was of the opinion that even women in stable marital relationships fear to be infected by their husbands whom they know to be unfaithful, but they felt that they had no obligation to take preventative action because the Zimbabwean society seem to condone extra marital relations by men.

Less than 50% of females and males in the 1999 survey reported that abstinence can help to prevent the spread of HIV infection. However, in the 2005/6 survey the proportion reporting abstinence as a way to prevent HIV infection increased to 80% and 88% among females and males in the same age group. This shows that by 2006, respondents were enlightened about the spread of HIV and AIDS. In a study by Mhloyi et al (2007), the Zimbabwean culture believes that only girls should abstain from sexual activities while men are allowed to graze around.

Younger and older respondents, 15-19 and 45-49 were somewhat less likely than those aged 20-39 years to know a place where they could go to be tested for HIV, 34% and 38% respectively. Never-married women and men who had not yet initiated sexual activity were less likely than their sexually active counterparts or ever-married

respondents to know a place to obtain an HIV test. Eighty two percent of the 20-39 age group is quite alert about getting tested.

Results from the FGDs show that there was low level of female condom use by the reproductive population of Zimbabwe, which reflects the low status of women in the society. Women find it difficult to advocate for female condom use due to cultural constrains. Studies in Venezuela, Jamaica and Mexico show that female condom is most acceptable where men already support family planning and the use of dual protection in general (UNFPA,2004). Thus, access to education, especially among women needs to be improved as a long term strategy to improve condom use.

In most rural areas there are inadequate health and social services particularly for sexually transmitted infection treatment and other aspects of sexual and reproductive health especially for the adolescents. During FGDS most adolescents' who were interviewed highlighted the need for these services in areas which included Gokwe, Buhera, Zimunya, Chipinge (Their rural areas). Adolescents in these areas do not know where to get Voluntary Counseling and Testing Services however the Ministry of Health and Child Welfare and other responsible bodies such as Population Services International should set up these services for easy accessibility for most adolescents in these areas.

Condom use is one of the main methods of preventing HIV infection. It has been suggested that children should be introduced to AIDS-prevention messages before they reach an age at which sexual activity typically begins. Results from the 1999 and 2005/6

surveys reported that more males (48% and 50%) as compared to females (37% and 41%) supported the idea of condom education to children aged 12-14 years. However, educating youth about condoms is sometimes controversial; with some saying it promotes early sexual experimentation. A study by Caldwell (2002), postulated that condom education should be taught in schools. However it reflects premarital sex especially among girls yet culture says they must keep their virginity.

Results reported that young women have sexual relationships with men who are considerably older, i.e. 5 years or more. This practice can contribute to wider spread of HIV and other STIs, because if a younger infected partner has sex with an older infected partner, this can introduce the virus into a younger uninfected cohort. Mhloyi (unpublished) noted the problem of intergenerational sex. She remarked that, "it is quite unfortunate that many people despite having better information on HIV and AIDS still approved intergenerational sex". Intergenerational sex gives less room for the younger partners to negotiate safe sex thereby increasing their vulnerability to HIV infection. In most cases, the older sexual partner will decide when, where and how to have sex.

5.2 CONCLUSION

Study findings indicated that the vulnerability to HIV infection is still high despite the current decline of HIV prevalence rate from 18.1% in 2006 to 13.7 in 2009 as documented by the Ministry of Health and Child Welfare, 2007. Therefore, more work is lying ahead of Zimbabwe in order to revamp the deadly epidemic. Risk behaviors continue to exist in the form of intergenerational sex, early sexual encounter, early

marriages, non use of condoms during high risk sex which exacerbates the spread of HIV infection.

5.3 RECOMMENDATIONS

Efforts to prevent the spread of HIV in Zimbabwe have been spearheaded by the Government through NAC, Non-Governmental Organizations and religious and academic Institutions. Prevention programmes have been significantly expanded since the turn of the millennium, but remain critically under-funded. In addition, prevention programmes aimed at behavior change and the prevention of mother to child transmission have also been instrumental in bringing about a decline in HIV prevalence.

- It is recommended that reproductive and sexual health education needs to be incorporated in the school curriculum starting from primary level up to university since these are the early ages of adolescents. This is very suitable for developing countries such as Zimbabwe because it is cost effective since it makes use of the available resources and infrastructural facilities. Reproductive health should be a compulsory and examined subject in schools and this move will see some teachers selected on merit basis capacitated to offer reproductive health courses.

- Gender disparities need to be addressed starting with laying a better foundation for the girl right from primary level. This is because gender inequality is the major driving force behind the feminization of poverty and HIV infection not only in Zimbabwe but in the whole of Sub-Saharan Africa. Thus, HIV and AIDS should be considered a gendered problem which requires a gendered solution.

- Respondents had little knowledge about HIV and AIDS therefore integration of HIV and AIDS prevention efforts and reproductive health is important. This is because the majority of HIV transmission takes place through sexual contact thus reproductive and sexual health information and services provide a critically important entry point to HIV and AIDS prevention. This also provides a conduit to and a delivery point for programs of care and treatment. Health reforms in Zimbabwe have separated sexual education, family planning and HIV prevention from each other by creating different segments in the health sector responsible for them. This undoubtedly increased potential rivalry for budgetary control, allocation and external funding and this is likely to weaken the effectiveness programmes. Thus, there is need to integrate all HIV related programs in order to strengthen their effectiveness and to avoid duplication of responsibilities.

- There is need to improve the availability and accessibility of VCT and PITC services especially in the rural areas. The VCT and support systems need to be strengthened and expanded.

- It is also recommended that the government should implement a continuous, coherent, intensive and comprehensive IEC programme carefully designed to capture the attention of the Reproductive Age Groups. In order to reduce the vulnerability of the RAG to HIV infection the IEC should be designed in such a way that it de-mystifies misconceptions about HIV and AIDS and male sexual prowess, and discusses in detail all the possible prevention strategies. The

programme should also identify and facilitate aberration from the risky behavior by gradually fostering a “new culture” acceptable in the current HIV and AIDS era. This, according to the findings of this research is the only “window of hope” for the future of the nation.

- It is with these findings in mind that the researcher recommends among other things that, the current HIV prevention efforts need to be strengthened, integrated and broadened in order to address the background and intermediate determinants of HIV infection. Reproductive and sexual health should be incorporated in the school curriculum, HIV should be considered a gender problem which requires a gendered solution, the availability and acceptability of precautionary measures such as condoms and VCT services need to be improved and comprehensive HIV and AIDS should be implemented.

- Adolescents’ should be equipped with enough knowledge, moral standards, good examples and materials such as condoms without any restrictions in order to make sex enjoyable without exposing them to too much risk of contracting HIV and AIDS. Condoms should be made available for those who are sexually active and theory must be taught the benefits of abstaining from sex. Careful information and behavior change campaigns, combined with marketing of condoms in attractive ways can also greatly increase acceptability.

- It is necessary that empowerment of women start in early childhood, ensuring that female babies are valued and well cared for as their male counterparts. There is need for empowerment for the girl-child both academically and economically. Most adolescent girls are drawn out of school because of poverty or family care needs especially in most rural areas where the survey was conducted. Adolescents' girls reported that they are now resorting to prostitution with "sugar daddies" and truck drivers who usually come to their nearest Growth Points (Nembudziya, Zimunya and Chipinge).

- The church should play a comprehensive and scale –up role in the fight and dissemination of information about HIV and AIDS. Pastors and church elders should continue to be involved in counseling adolescents starting from Sunday school up to marriage especially on areas of choosing a life partner, going for counseling and testing and even offering post counseling services complimenting the efforts of New Start Centers. Pastors however should be trained to be counselors.

REFERENCES

Adler M.W. (2000): *The ABC of Sexually Transmitted Infections*, BJM Publishing Group, London.

Basset M.J and Mhloyi M. (2002): *Women and AIDS in Zimbabwe*: the making of an Epidemic International Journal of Health Services.

Balmer H. et al. (2005): *Changing Women and Avoiding Men*: Gender Stereotypes and Reproductive Programmes, IDS Bulletin.

Baylies S. and Bujra B. (2006): *HIV and AIDS is gold*: HIV is platinum; Bush Radios use the entertainment education strategy.

Caldwell, J.C. (1997): *The Impact of the African AIDS epidemic*, Australian National University.

Central Statistics Office: (Zimbabwe) and Macro International Inc. *Zimbabwe Demographic and Health Survey 1999.* Calverton, Maryland: Central Statistics Office (Zimbabwe) and Macro International; 2000.

Central Statistics Office: (Zimbabwe) and Macro International Inc. *Zimbabwe Demographic and Health Survey 2005/6.* Calverton, Maryland: Central Statistics Office (Zimbabwe) and Macro International; 2006.

Chingombe E. (unpublished, 2001 Msc Thesis): *Adolescents and Reproductive Health Issues*: Centre for Population Studies.

Chiroro C. et al, (2002): *The Zimbabwean Male Psyche*: With Respect to Reproductive Health, Gender and HIV, Centre for Applied Psychology, Harare.

Erulka G. and Phiri A. (2005): *Women, AIDS and Reproductive Issues*, Harvard University Press, Cambridge, UK

Fapohunda J. and Johnson T. (2004): *Reducing the risk of HIV and aids among sex workers, Socio economic and gender barriers*, American Journal of public health.

Greem M. (2000): *Changing Women and Avoiding Men*: Gender Stereotypes and Reproductive Programmes, IDS Bulletin.

Jackson H. (2002): *AIDS Action Now*: Centre for Applied Psychology, Harare.

Jackson H. (2002): *AIDS Africa*: A Continent in Crisis, SAFAIDS, Harare.

Hunter G. (1994): *Women, AIDS and Reproductive Issues*, Harvard University Press, Cambridge, UK.

International Monetary Fund. (2004): *The Zimbabwe Further Analysis*: The Socio Economic Demography Situation of Adolescents Young Adults in Zimbabwe, Macro International Maryland.

Kazdim C. (1990): *Reproductive Health, Gender and HIV*, Harvard University Press, Cambridge.

Kim Y. and Marangwanda C. (1996): *Involving Men in Family Planning*: Centre for Communication Programmes, Centre for Applied Psychology, Harare.

Lowensonet F. et al (1996): *Reproductive Health Rights in Zimbabwe,* Training and Research Support Centre, Harare.

Machingura H. (2010): *A New Agenda for Women's Health*, Centre for Communication Programmes, Centre for Applied Psychology, Harare.

Marsh E. et al (2005): *Socio Demographic disparities*, Vancouver, Harvard University Press, Cambridge.

Marson M. (2002): Increasing *Accesses to HIV testing and Counseling while respecting human rights*, Australian National University.

Mavheneka M. (2000): *Information, Prevention and Support in Zimbabwe,* AIDS counseling Trust, Harare.

Mbizvo W. et al (1994): *Condom Use and the Risk of HIV Infection*: Who is Being Protected? Central Africa Journal of Medicine (40), University of Zimbabwe, Harare

Mbizvo W. et al (1997): *Knowledge of Sexually Transmitted Diseases and AIDS Risk Awareness and Condom Use in Zimbabwe,* University of Zimbabwe, Harare.

Meekers D. and Wekwete N (1997): *Zimbabwe Further Analysis*: The Socio Economic and Demographic Situation of Adolescents Youths Adults in Zimbabwe, Macro International Maryland.

Meekers D. and Wekwete N (1997): *The Zimbabwe Further Analysis*: The Socio Economic Demography Situation of Adolescents Young Adults in Zimbabwe, Macro International Maryland.

Mhloyi M. et al, (1998): *The role of Church in HIV and AIDS Intervention Strategies In Zimbabwe,* Future Group International, Zimbabwe Consultative Report, Harare Zimbabwe.

Mhloyi M. unpublished: *Family Sexuality and Reproductive Health in Zimbabwe, Harare, Zimbabwe.*

Mhloyi M. et al (2007): *The HIV/AIDS Challenge in Africa,* An Impact and Response Assessment, University of Zimbabwe, Harare, Zimbabwe.

Ministry of Health and Child Welfare (2006): *Reproductive Health Behaviour Change Communication Strategy for Zimbabwe.*

Murray H. and London S. (2004): *International seminar series discussion papers*, volume 40.

National AIDS Council (2004): *State of World Population 2005*, The Promise of Equality, gender Equity, Reproductive Health and the Global Effort to End Poverty, Harare, Zimbabwe.

National Research Council (1996): *Comprehensive reviews of behavioral change*. Harare, Zimbabwe.

Norman G.R. and Steiner D.L. (2003): ***PDQ*** *Statistics 3rd edition*, Toronto. B.C Becker

SAFAIDS (2004): *Looking at Men's Sexual and Reproductive Health needs*: The Guttmatcher Report on Public Policy, Guttmatcher Institute.

Timberlake C. (2002): *Increasing Accesses to HIV testing and Counseling while respecting human rights*, Australian National University.

UNAIDS (2004): *The Gender Aspects of HIV and AIDS Pandemic*

UNAIDS (2006): *State of World Population 2004: Decisions for Development; Women Empowerment and Reproductive Health.*

United Nations International Children's' Educational Fund (2003): An Assessment of the Youth HIV and AIDS Era.

United Nations Population Fund (2004): *State of World Population 2004*: Decisions for Development; Women Empowerment and Reproductive Health.

United Nations Population Fund (2005): *State of World Population 2005,* The Promise of Equality, gender Equity, Reproductive Health and the Global Effort to End Poverty.

United Nations (2006): *World Contraceptive Use,* New York: UN Department of Economic and Social Affairs, Population Division.

World Health Organisation (2000): *The Gender Aspects of HIV and AIDS Pandemic*.

Muhwava W. (1998): *Condom use within Marriage and Consensual Unions in the Era of HIV and AIDS in Zimbabwe*, University of Zimbabwe, Harare, Zimbabwe.

Zinhanga F. (2001): *Knowledge of Sexually Transmitted Diseases and AIDS Risk Awareness and Condom Use in Zimbabwe,* University of Zimbabwe, Harare, Zimbabwe.

Zimbabwe Reproductive Health Policy (2003): *State of World Population 2004*: Decisions for Development; Women Empowerment and Reproductive Health, Harare, Zimbabwe.

Zimbabwe National Behaviour Change Strategy: *An assessment of behavior change among youths*, Harare, Zimbabwe

APPENDIX A

FOCUS GROUP DISCUSSION (FGD) GUIDE

Name of facilitator …….

Name of research assistant…….

Date of discussion……..

Venue of discussion……

Number of participants……

Age spread:	Males	Females
	15-19	15-19
	20-24	20-24
	25-29	25-29
	30-39	30-39
	40-49	40-49

Is HIV and AIDS still a problem in the community? Explain.

Can HIV/AIDS be treated now? How?

What are the methods of preventing the spread of HIV and AIDS?

How practical are these methods in preventing the spread of HIV?

How accessible are HIV and AIDS drugs?

What can be done to improve their accessibility?

Is the availability of drugs undermining HIV and AIDS prevention?