



Department of Population Studies

Association between Types of Sexual Partnerships and Condom use in Botswana

**A research essay submitted in partial fulfilment of the requirement of Masters of Arts in
Social Sciences**

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DECLARATION

I, the undersigned, hereby declare that the work contained in this research essay entitled “Association between Types of Sexual Partnerships and Condom use among men and women in Botswana” is my original work and has not been previously submitted for the award of any degree of any university. All sources that I have used have been acknowledged by means of completed references.

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ABSTRACT

The practice of multiple concurrent sexual partners, inconsistent condom use and low levels of male circumcision are key drivers of the HIV epidemic in Sub-Saharan Africa. The percentage of people with multiple concurrent partnerships in Botswana are amongst the highest in the world with, 17.5% of men and women practicing having multiple and concurrent partners. Long term concurrent relationships, like serial monogamous relationships are often characterised by strong emotional, social and economic ties, numerous studies suggest that condom use in such relationships tends to be much lower. Although trends in risky sexual behaviours in high HIV prevalence countries have generally declined over the past decade, several countries in sub-Saharan Africa have experienced declines in condom use and an increase in the number of sexual partners. At 22%, Botswana has the third highest HIV prevalence in the world, after Lesotho and Swaziland. Data from the 2013 Botswana AIDS Impacts Survey (BIAS IV) was used to investigate the association between types of sexual relationships and condom use among men and women in Botswana. Only respondents who had had sexual intercourse during the past 12 months leading to the survey and were aged between 15 and 54 were included in analysis. Data was analysed using both bivariate and multivariate (binary regression) analysis techniques. The logistic regression results show high prevalence of MCP, for instance those individuals with secondary education and tertiary education were associated with a decrease in the likelihood of having had multiple concurrent partners during the year leading to the survey, compared to those with non-formal education. Furthermore, statistically significant relationship was observed between types of sexual relationships, consistent condom use and socio demographic characteristics. The association between condom use consistency and MCP diminished with the introduction of control variables. However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were males increased. A positive association was observed between consistent condom use, age of respondents and marital status. Individuals who were once married were associated with a decline in the odds of having always used condoms with their partners compared to those who were never married. However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were once married increased. Information generated from this study will serve as a basis for further research in the HIV prevention strategies aimed at reducing concurrent sexual partners. It will also provide information to other organizations that are currently implementing MCP

programs, to assist them develop communication strategies to reduce MCP. The results indicate that risky behaviours such as MCP, inconsistency condom use leading to HIV/AIDS prevalence are still practiced. Therefore, there is an urgent need for effective HIV prevention programming that educate people on the importance of reducing one's sexual partnerships, regardless of their HIV status for HIV prevention. Programs and policies on HIV/AIDS should also target cultural norms and beliefs that promotes practice of risky sexual behaviours.

Key Words: Types of sexual relationships, Multiple Concurrent Partnerships, Serial Monogamy Condom Use, HIV/AIDS, Botswana.

LIST OF ACRONYMS

ATR	Anti-Retroviral Treatment
BIAS IV	Botswana AIDS Impact Survey IV
CSO	Central Statistics Office
EAs	Enumeration Areas
HDI	Human Development Index
FHI	Family Health International
GOB	Government of Botswana
HBM	Health Belief Model
HIV	Human Immunodeficiency Virus
MCP	Multiple Concurrent Partnerships
NACA	National AIDS Coordinating Agency
NGO	Non-Governmental Organizations
PMCT	Prevention of Mother to Child HIV Transmission
PSI	Population Service International
SADC	Southern Africa Development Community
STDs	Sexual Transmitted Diseases
WHO	World Health Organization
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID	United States Agency for International Development

UNICEF

United Nations Children's Fund

UNFPA

United Nations Fund for Population Activities

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CHAPTER ONE: INTRODUCTION

1.1 Background

Concurrent and other multiple sexual relationships are deeply rooted in Botswana's culture and the proportions of concurrent partnerships that overlap for months or years in Botswana are also among the highest (17.5%) in the world, with men and women practicing MCP at almost the same levels (Population Service International [PSI], 2010). High levels of multiple and concurrent sexual partnerships, along with low rates of incorrect or inconsistent condom use and low rates of male circumcision are the key drivers of the HIV epidemic in and Southern Africa and thus one of the key priority interventions recommended is the reduction of multiple and concurrent partnerships for both men and women (Southern Africa Development Community [SADC], 2006).

Certain cultural norms and social institutions in Botswana promote and even institutionalize multiple and concurrent sexual partnerships as socially acceptable forms of sexual behaviour. Numerous customary sayings acknowledge and support the behaviour, such as, "Monna ga a agelwe losaka" which can be translated as "A man can't be contained in one kraal (cattle enclosure)" and, "Only a mother knows her child's father." Until recently, the behaviour was not widely discussed (AIDS Star One, 2010). These cultural accepted practices encourage and conditions people to engage in different types of sexual relationships, this reverses government efforts in mitigating HIV.

Four main reasons for having multiple sexual partners given by men and women in Botswana include benefits emanating from material gain, desire for sexual variety, avoiding circumstantial abstinence (physical separation from primary partner, primary partner is pregnant or has recently given birth, transition between relationships) and to find a serious or stable partner (National AIDS Coordinating Agency [NACA], 2009). The persistence of such risky sexual behaviours signal the need for further research and to be specific about what kinds of interventions are most effective in reducing the risk of HIV transmission due to concurrent and other multiple sexual partnerships.

In Africa, men and women often have multiple and concurrent partnerships that can overlap for months or years. For instance, 18%, 22% and 55% of men in Tanzania, Zambia and Lesotho, respectively, reported having 2 or more regular, ongoing (lasting for at least a year) sexual

partnerships during the year leading to the survey (World Health Organisation [WHO], 2005). Concurrency is common in many African countries, and evidence strongly shows that concurrency is mainly to blame for high HIV prevalence in Southern Africa (James & Matikanya, 2009; Parker et al., 2010). Sub Saharan Africa has been disproportionately affected by the HIV epidemic, a home to 70% of all the new HIV infections (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2013). However, since 2001, there has been a decline (34%) in the number of HIV incidences among adults in the region. The decline in HIV prevalence has been attributed to changes in sexual behaviour, such as delayed sexual debut, high levels of condom use and reductions in multiple partners (UNAIDS, 2013).

Concurrent sexual networks connect individuals in a higher number of sexual relationships that creates ideal conditions for rapid spread of HIV (Gourvenec et al., 2007). HIV is able to spread when infected people have sex with multiple partners during the acute phase. This is in contrast to monogamous relationships where individuals have one sexual partners at a time where HIV is unable to spread because there are no networks (Gourvenec et al., 2007). Serial monogamous relationships also exclude partners from sexual network, the risk of HIV infections is related to the risk of previous sexual partners of the concurrent partner (Parker, 2011). However, even if partnerships do not overlap (serial monogamous relationships), frequent unprotected sex increases the risk of transmission of sexually transmitted infections. Transmission potential exists when the gap between partnerships is shorter than the remaining infectious period. There is thus a high potential for sexually transmitted infections, as even if partnerships are not behaviourally concurrent, they may be biologically concurrent and is further complicated by patterns of condom use that may change overtime (Mercer et al., 2007). The prevalence of MCP and serial monogamy in Botswana increases the chances of infections exposing the partner to HIV during period of high viraemia in primary infections and later by affecting partners in a sexual network.

Serial and concurrent sexual partnerships are deeply rooted in the local social, cultural, and economic contexts of Southern Africa (Astatke & Meyanathan, 2012). Motivations for engaging in multiple and concurrent partnerships include exchange of material goods and money, sexual dissatisfaction with one sexual partner, a “safety-net” against losing a main partner, peer and social pressures, particularly among young people, and the social acceptance of having multiple partners (Epstein, 2007; Parker et al., 2007). Population mobility and migratory labour patterns in Africa,

especially in Southern Africa, have also been shown to contribute to MCP. The practice of mobile workers establishing secondary sexual relationships in their destination communities and visiting sex workers while on the road has been well-documented (Hudson, 1996).

Polygamous relationships which are culturally sanctioned in sub Saharan Africa present risk of MCP scenarios if one member of the network compromises the link by having an extra relationship out of the network (Gourvenec et al., 2007). In many societies, having multiple partners is a powerful signifier of masculinity, and a relatively wealthy man may even be expected to have more than one wife or girlfriend as long as he can afford to do so, women involved in such relationships often have little power to negotiate with their partners about the timing of sex and use of condom (Halperin & Epstein, 2004). Polygamous relationships in Africa may also provide a normative basis for social acceptance of men having more than one sexual partner and also have been attributed to the high cultural value placed on fertility. Men are hypothesized to demonstrate their virility by having multiple sexual partners, and numerous children to ensure continuation of their lineage (Caldwell, 1989).

In countries in the north and western Africa as well as other Muslim regions of the world with higher levels of polygamy HIV infection rates tend to be considerably lower (Halperin & Mah, 2008). The most likely explanation is twofold: first, in most of West Africa and in all Muslim countries, nearly all men are circumcised. Secondly, large scale heterosexual concurrency networks can only emerge if a significant proportion of women are also engaging in multiple, longer-term relationships (Halperin & Mah, 2008). But in Muslim societies generally, women's sexual behaviour tends to be under strict surveillance, which limits the extent of sexual networks (Halperin & Mah, 2008). In contrast, a large number of African women are typically expected to be monogamous and submissive to the sexual demands of their husbands or boyfriends (Campbell, 2004). Requesting faithfulness or condom use from a boyfriend or husband is often impossible and can lead to gender based violence against women (Gupta, 2002; Townsend et al., 2011).

Gender power relations within relationships also negatively impact consistent or any condom use, for example males with higher relationship power are more likely to overpower women. Such power relations within relationships may also negatively influence risk exposure to HIV infections (Parker, 2011) It is common for those involved in concurrent partnerships, serial monogamous

relationships to use condoms inconsistently with one or both partners or never have protected sex with either partner and that many only used condoms during the initial stages of the relationships. It may also be that relatively inconsistent condom use is the result of lack of condoms in rural areas, lack of knowledge, where condoms can be found or failure to consistently carry condoms (Underwood et al., 2008). Another serious problem is that although some people are likely to consistently use condoms, condoms use decreases in longer-term relationships where love and trust interact negatively with condom use. Consistent use of condoms is more likely to occur if the sexual partner is a casual acquaintance (Hloniphane, 2014). Some people do not use condoms because they believe that the use of a condom makes their partners think that they have HIV/AIDS or shows that they think their partner has HIV/AIDS. Some of the barriers to condom use include embarrassment when buying condoms, concern that condom use reduces sexual pleasure that care must be taken during sex to prevent condom breakage, and that quick withdrawal after sex is required or condom may come off (Ehrhardt, 1996). Higher coital frequency in monogamous and serial monogamous relationships may also result in inconsistent condom use. Increased coital frequency reflect increased opportunity for condom non-use for at least one coital event. The often allude to disadvantages of condom use such as inconvenience, messiness, and interference with sexual with pleasure might be magnified when coitus is more frequent with a specific partner (Katz et al., 2004).

In sub-Saharan Africa, urban, more-educated, and wealthier women and men are more likely to have concurrent partnerships than their rural, less educated, and poorer counterparts (Mishra et al., 2009). This has been partly attributed to economic status in urban areas. Furthermore, females used their sexuality as an economic resource, and that more affluent, higher risk men were more desirable as partners (Mishra et al., 2009). However, in one study women and men regardless of marital status became a little less likely to have sex at all during the year leading to the survey year, became less likely to have sex outside marital or cohabiting relationships and became less likely to have one or more casual sexual relationships (Kirby, 2008). Married women maintained low levels of extramarital sex. Both single men and women became less likely to have sex during the year leading to the survey and less likely to have sex with multiple sexual partners (Kirby, 2008).

Botswana has demonstrated a strong national commitment in responding to its HIV and AIDS epidemic and has become an exemplar for many in sub-Saharan Africa. In addition to the foregoing HIV prevention programs, a national Multiple Concurrent Partnership campaign was “*O icheke*” campaign was launched in 2009 with the main aim of advocating for behavioural change and the reduction of sexual partners. The campaign sought to address Botswana’s long term goal of zero new HIV infections (AIDS Star One, 2010). The “*O icheke*” campaign was launched against the background of research showing that MCP is one of the key drivers of high prevalence in Botswana, others being intergenerational sex, alcohol abuse, risky sexual practices, stigma and discrimination, gender based violence, and sexual abuse (Matlhare, 2009).

While Botswana has shown significant progress in areas regarding HIV treatment and care, specific areas within HIV prevention have not been as effective (UNAIDS, 2016). Evaluation conducted mainly on MCP and HIV risk reduction behavioural program shows that MCP was not affected by the “*O icheke*” campaign, but exposure associated with risk reduction strategies (more consistent condom use, increase HIV testing, greater confidence in condoms as risk avoidance strategy) were affected (AIDS Star One, 2010). The “*O icheke*” program campaign duration and intensity of exposure was insufficient to alter behaviours on MCP, given its socially accepted nature. This suggest that there is still general low awareness on the importance of reducing one’s sexual partnerships for HIV prevention (AIDS Star One, 2010).

In Botswana few research has been carried out on determinants of multiple concurrent, serial and monogamous relationship little is known and understood about the association between types of sexual relationships and sexual and HIV risk behaviours. Botswana AIDS Impact Survey IV (BIAS IV) results indicates that multiple sexual partnerships, inconsistent and incorrect use of condoms are still the prevalent in Botswana which are major contributors to the transmission of HIV. Although multiple approaches such as the “*O icheke*” program have deliberately addressed issues of concurrency to bring the epidemic under control. There is a need for the program to specifically address the negative cultural norms and beliefs that promote multiple concurrency and serial monogamous sexual relations and encourage positive cultural practice. Recognizing the important role types of sexual relationships play in increasing the risk of HIV transmission will help implement strategies that break up multiple and concurrent sexual networks subsequently leading to reducing the numbers of partners. It is in light of this that this paper intends to investigate

the association between types of sexual relationships, and condom use in Botswana using BIAS IV data.

This paper adopts the Health Belief Model (HBM) theoretical framework, which has been used to explain various health actions and behaviours such as high risky sexual behaviours. The HBM assumes that an individual's characteristics, perceptions, environment and past experiences are crucial factors which shape their actions and perceptions of the risks and severity of the outcomes of their behaviour, such as indulging in sexual risk behaviours for instance, inconsistent condom use and having multiple concurrent sexual partners (Family Health International [FHI], 2004).

1.2 Study Area

Botswana is a landlocked country situated in the centre of southern Africa, sharing borders with South Africa (to the south and east), Namibia (west), and Zimbabwe and Zambia (north). It is a semi-arid country of 581,730 square kilometres, with a relatively small population of 2,045,752 (GOB, 2013).

The country's mineral wealth has been utilized sustainably for human capital, provision of basic services and infrastructural development (GOB & United Nations [UN], 2010). There have been substantial achievements in several areas, notably the elimination of gender disparity in primary and secondary education, halving the proportion of the population without sustainable access to safe drinking water, and ensuring that at least 90% of one-year-old children are fully immunized. The country is characterised by a fairly large middle-class-population, compared to most other African states (GOB & UN, 2010). Despite being an upper middle income country, Botswana continues to face development challenges such as high HIV prevalence rates, high mortality rates among both children and women; persistent poverty and inequality; high unemployment especially among youth; vulnerability to external shocks due to lack of diversification of the economy beyond minerals (United Nations Children's Fund [UNICEF], 2012).

Botswana is one of the countries which have the highest HIV prevalence in the world (AIDS Star One, 2010). Prevalence is higher among females than among males and increases sharply with age, peaking between the ages of 35-39 and 45-49 years estimated at 43.7% and 41.8% respectively (Statistics Botswana, 2013). The male and female patterns show differential peaks, with women's

prevalence peaking (nearly 50.6 percent) at an earlier age (35-39) while that of males peaks to 43.8 percent in the 40-44 age group. Close to three quarters (73.4%) of the population 6 weeks and above participated in HIV testing, of which, over three quarters (79.6%) wanted to know their HIV test results (Statistics Botswana, 2013).

HIV and AIDS has had a pervasive influence on the wellbeing of Botswana, unprecedented in magnitude and reflected in the decline in Botswana's Human Development Index (HDI) between 1990 and 2000 (Government of Botswana [GOB], 2013). This occurred despite considerable concurrent improvements in all non-health measures of welfare, e.g., per capita income, education, access to basic services such as water and sanitation, and household incomes (GOB, 2013). In the specific instance of HDI, the non-health components, income and literacy, improved steadily whilst the health related component, life expectancy, fell sharply from 65.3 years in 1991 to 55.6 years in 2001, and further to 54.4 in 2006. As expected, economic studies suggest significant losses with regard to labour productivity, the rate of progress against poverty and the rate of economic growth (GOB, 2013).

The HIV/AIDS pandemic that affects Botswana remains the country's main health concern. Apart from the immense human suffering that AIDS is causing, the economic impact of the disease in Botswana is also considerable (GOB & UN, 2010). HIV/AIDS generally hits adults in their most economically productive years. Due to increased mortality and chronic illness, the labour force in Botswana is constantly reduced, which in turn affects households and individual families. Because of HIV, life expectancy at birth has dropped noticeably in Botswana and most of Sub-Saharan Africa over the past decades (UNICEF, 2012).

Nonetheless, the country is making progress: Botswana's Prevention of Mother to Child HIV Transmission (PMCT) programmes have been praised as the most successful in Africa. According to UNICEF (2011), majority (96%) of babies born under the programme are HIV negative and Botswana is the first country to reach nearly 80 per cent coverage for such services. The government has shown a high level of dedication in terms of fighting HIV. HIV treatment programmes in Botswana are highly advanced and anti-retroviral drugs are readily available (UNICEF, 2011).

The HIV/AIDS in Botswana is a generalised epidemic with transmission occurring primarily in the general population. As a result, substantial prevention resources have been devoted to interventions directed at the general population (NACA, 2009). Botswana has achieved notable success in the scaling up HIV/AIDS care and treatment as well as interventions for the treatment of mother to child transmission. The key drivers of the epidemic are gender based violence, intergenerational sex, multiple concurrent partners and substance abuse (NACA, 2009). The “*Oicheke*” programme serves to address lack of knowledge about the risk of concurrency and HIV, intergenerational sex and transactional sex and to provide information regarding norms and values about sex and relationships (Matlhare, 2009).

Botswana’s achievements in addressing its HIV epidemic have surpassed most countries in magnitude, focus and impact. Strong and sustained political will, generous development partner funding and impressive scientific expertise combined to create a successful HIV response never before imagined possible on the continent of Africa (Botswana Global HIV/AIDS Response Report, 2013). However, despite meeting and in some instances exceeding the targets and commitments of the 2011 United Nations Political Declaration on HIV and AIDS General Assembly, Botswana now faces the even greater challenge of sustaining its success without significant donor support (GOB & UN, 2010). Compounding significant financial and human resource constraints, as well as complex and often contradictory sociocultural realities pose serious barriers to successfully implementing prevention strategies (GOB & UN, 2010).

The Botswana AIDS Impact Survey IV point to moderate gains across some areas in the HIV response (Statistics Botswana, 2013). HIV adjusted incidence is estimated at 1.35%. HIV prevalence is estimated at 18.5% for the general population (aged 18 years and over), with females at 19.2% and males 14.1%, a slight increase from BAISIII, 2008 estimated at 17.6%, 20.4% and 14.2, respectively (Statistics Botswana, 2013). HIV-infected infants (under 18 months) were estimated at 2.2% with 10,021 children, nearly 100% of those eligible receiving ART. Results from the Botswana Sentinel Surveillance Survey (2011), estimated HIV prevalence to be 30.4% among women ages 15-49. HIV Prevalence data varied slightly depending upon residence and district in BAIS IV with urban estimates at 17.5% and rural at 15.8% (Statistics Botswana, 2013).

Botswana AIDS Impact Survey IV (BAIS IV) results indicate that there has been a decline in consistent condom use among the general population, both genders, and across all ages groups in the general population falling from 90.2% recorded in the 2008 BAIS IV to 81.9% recorded in the 2012 BAIS IV (Statistics Botswana, 2013). Decreased rates of condom use were evident in females from 89.5% to 83.14% and males from 90.4% to 81.2%. Consistent condom use with casual sexual partners among 15-49 year olds was only 41.9%. Furthermore, the results show higher condom use (71.9%) at the last sex act casual partners, r than with regular partners at 44.8% (Statistics Botswana, 2013).

Estimates of young males' high risk sexual behaviour patterns reported in the BAIS IV data were also revealing as 48.7% ages 15-19 years reported more than one sexual partner in the past 12 months as compared to their female counterparts at 25.2% (Statistics Botswana , 2013) .Younger men also showed lower circumcision rates than their older male counterparts, those in the 15-19 and 20-24 year categories at 23.4% and 22.3% as compared in the 30-34 and 35-39 and 55-59 year categories at 26.5%, 30.8% and 39.2% respectively. Males were also shown to display higher discriminatory attitudes at 5.0% compared to females at 2.7% (Statistics Botswana, 2013).

1.3 Statement of the Problem

Globally increasing attention has been paid to the role of concurrent sexual partnership, Demographic and Health Surveys and AIDS Indicator Surveys data has been used to provide opportunities to measure the prevalence of concurrent sexual partnerships, consistent condom use to assess the relationship between sexual concurrency and HIV infection. Empirical research has established that having multiple sexual partners combined with inconsistent condom use increases the risk of getting infected with HIV and other sexually transmitted infections. However, the empirical understanding of the prevalence of sexual concurrency, inconsistent condom use and their role in the spread of HIV in developing countries like Botswana remains limited, partly due to limited availability of literature on sexual partnerships and frequency of condom use with multiple and concurrent partnerships. Multiple sexual partnerships, inconsistent and incorrect use of condoms are still the major contributors to the transmission of HIV in Botswana and there are studies that have shown that such behavior is considered normal by the society (NACA, 2015).

Quantitative studies conducted in Botswana have indicated a significant number of men are more likely than women to report risky behaviour such as inconsistent condom use with casual partners and having more than one concurrent sexual partner than women (Gourvenec et al., 2007). Since the first case of HIV/AIDS was reported in Botswana, the epidemic has progressed rapidly, affecting all levels of society (Gourvenec et al., 2007). NACA (2015), argues that although the main mode of transmission is heterosexual intercourse, the HIV epidemic is spreading along the fault lines of socio economic development such as poverty, food insecurity and gender based violence among others. The problems are compounded by behavioural practices such as multiple concurrent partners, inconsistent condom use, low levels of male circumcision and the presence of sexually transmitted diseases (NACA, 2015). In addition to other HIV prevention programmes, a national Multiple Concurrent Partnerships campaign (*O icheke* programme) was conducted to advocate for behaviour change in sexual risky behaviours and the reduction of sexual partners (Lillie,2010).

While Botswana has made great strides in areas concerning HIV treatment and care, specific areas within HIV prevention such as condom use have not been as effective. The large amount (85%) of condoms that are available in the country are for free (United Nations Funds for Population Activities [UNFPA], 2014). On average, 50 condoms a year are available for every man in Botswana, this surpasses the UNFPA 2011-2014 regional benchmark of 30 male condoms distributed per man per year (UNFPA, 2014). However, lack of comprehensive HIV knowledge and condom use remains low in Botswana and efforts in HIV prevention require attention (UNFPA, 2014). Condom use has declined over time in Botswana, from 90.2% of people claiming to use condoms during sex, in 2008, to 81.9% in 2012. BAIS IV results show that 15.8% of men and women aged 15-49 had concurrent sexual partners in the past 12 months (Statistics Botswana, 2013). However, there has been some improvements in young adults who reported more than one sexual partner in the past 12 months from 24% in 2012 to 15.8% in 2013 (Statistics Botswana, 2013). The aforementioned results show that high-risk behaviours such as inconsistent condom use and multiple and concurrent partnerships are still prevalent among adults in the country. In relatively small population such as Botswana's, the impact of high-risk behaviours such as inconsistent condom use and multiple and concurrent partnerships on HIV infection is great. Botswana is still struggling to challenge the myths and views surrounding HIV prevention and transmission, with cultural beliefs pervasive in many areas of the country (AIDS Star One, 2010).

Despite Botswana's expansive HIV/AIDS prevention interventions and programme, which focus on consistent condom use, multiple partners, stigma, intergenerational and transactional sex, alcohol abuse and HIV, behaviour change still lags behind (NACA, 2015). It is apparent that HIV programmes and MCP interventions in Botswana have not yet yielded desired results. Global and regional interest in HIV studies and HIV/AIDS prevention interventions and programme have also largely focused on MCP with much less attention focused on the correlation between types of sexual partnerships and condom use. In the context of Botswana such studies and programmes offer a few insights into issues regarding different types of sexual relationships, inconsistency condom use. Therefore, more research should be conducted in order to reduce the number of sexual partners in all types of relationships and to rigorously analyse the relationship between types of sexual partnerships and condom use for HIV prevention.

1.4 Justification of the Study

MCP, is one of the key factors that spread HIV efficiently in the country, furthermore MCP practices hinder efforts made by the government of Botswana to eliminate new cases of HIV and reducing the impact of AIDS. Wider understanding of the determinants of types of sexual relationships such as MCP and the association between types of sexual relationships and condom use, would lead people to change their behaviour and embrace preventive approaches toward the epidemic. Information generated from this study will serve as a basis for further research in the HIV prevention strategies aimed at reducing multiple concurrent sexual partners. It will also provide information to other organisations that are currently implementing MCP programmes, to assist them develop communication strategies to reduce MCP.

1.5 Objectives

1.5.1 General objective:

The general objective of the study is to investigate the levels and determinants of various types of sexual partnerships and their association with consistent condom use among men and women in Botswana.

1.5.2 Specific objectives:

- To determine proportion of respondents involved in various types of sexual relationships, especially MCP and Serial monogamy.
- To determine proportion of respondents using condoms in various types of sexual relationships.
- To establish the relationship among sexual partnership, other socio demographic characteristics on one hand and condom use on the other.
- To investigate the relationship between multiple concurrent and serial monogamous sexual relationship and consistent condom use.

1.6 Hypotheses

The following alternative hypotheses were made:

1. Having concurrent partners is associated with condom use.
2. Individuals residing in urban areas are more likely to use condoms than those in rural areas.
3. As level of education increases the practice of MCP and therefore decrease monogamy.
4. Those who were once married are less likely to practice MCP and serial monogamy than those never married.
5. Youth aged less than 25 are more likely to use condoms in all types of sexual relationships than their older counterparts.
6. Those who practice MCP are more likely to use condoms consistently than those in serial monogamous relationships.

1.7 Definition of Terms

The term multiple and concurrent partners has been defined by UNAIDS (2011), as overlapping sexual partnerships in which sexual intercourse with one partner occurs between two acts of intercourse with another partner. Concurrency need not change the rate of partner acquisition, it simply affects the overlap of partners over time (Morris & Kretzschmar, 1997). Concurrency can

be long term, in which the overlap last for months or years, or short term, in which the overlaps for hours or days (Epstein & Morris, 2011).

Monogamy is the practice of having only one sexual relationship at a time (UNAIDS, 2011). Sequential or serial partnerships, is whereby an individual engages in a sexual relationship with only one partner, with no overlap in time with subsequent partners (Mah & Halperin, 2010). Consistent condom use is defined as always using condoms during sexual intercourse during the past twelve months leading to the survey.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

There has been an intense debate in the last two decades on the relative roles of unsafe sex and unsafe health care. Increasing attention has been paid to the role of concurrent sexual partnerships in the attempt to explain widely varying levels of national and sub-national HIV prevalence, (Mah & Halperin, 2008; Epstein, 2007). The concurrency hypothesis has strong theoretical support, from extensive data across numerous countries and epidemic types have demonstrated that engaging in sexual relationships with multiple partners without consistent condom use increases the risk of acquiring and transmitting HIV, since each new partnership introduces a potential additional pathway for HIV transmission. on HIV spread in Sub- Saharan Africa (Watts and May ,1992). The empirical understanding of the prevalence of sexual concurrency and its role in the spread of HIV in developing countries remains limited, partly due to limited availability of data on sexual partnerships and a lack of consensus on the measurement of concurrency (Mishra et al., 2009).

While there is general agreement on the broad definition, sexual concurrency can take several forms depending on the social context and the life stage of an individual, and certain forms can be more or less risky for HIV transmission (Mishra & Assche, 2009). The term multiple and concurrent partners (MCP) actually incorporates two types of behaviour: having multiple relationships that occur one after another (or multiple serial partnerships) or having multiple partnerships that overlap in time. The latter pattern of multiple sexual partnerships, when they overlap in time or are concurrent, has been shown to accelerate transmission of HIV within a community. Moreover, it has proved much more challenging for people in ongoing longer term relationships to consistently use condoms (Watts and May ,1992; Epstein, 2007).

Condom uptake remains pitifully low in most countries, especially those with high HIV prevalence especially in developing countries. In 2012, the donor community decreased their supplies of both male and female condoms compared to 2011. Approximately 2.4 billion male condoms and 31.8 million female condoms were donated in 2012 as compared to 3.4 billion male condoms and 43.4 million female condoms in 2011 (UNAIDS, 2013). Country reports confirm that condom access dropped in 2012; Namibia reports that funding challenges contributed to a decline in the number of condoms distributed in 2011–2012, while Uganda reports frequent periodic shortages and stock-

outs of free condoms. Much more strenuous efforts need to be made to both promote their use and to make them ubiquitously available. Funding challenges undermine efforts to ensure ready access to both male and female condoms. With condom programming largely funded by international donors in many countries, funding uncertainties have complicated national forecasting, procurement, supply and distribution (UNAIDS, 2013).

Certain cultural norms and social institutions support and even institutionalize multiple and concurrent sexual partnerships as socially acceptable forms of sexual conduct. Patriarchy, for example, is deeply entrenched in Africa's social institutions affording husbands absolute decision-making power, and forcing wives to subordinate their interests to theirs (Caldwell & Caldwell, 1987). Men and boys are also affected by gender expectations that may encourage risk-taking behaviour, discourage accessing health services, and narrowly define their roles as partners and family members (UNFPA, 2008).

In African societies, masculinity has influenced risky sexual behaviours among men who have multiple sexual partners, as it emphasizes male superiority, and power and control over women. Within this masculine ideal, men are often compelled to overtly demonstrate sexual control over and "success" with women (Townsend et al., 2010). This in turn leads to the pursuit of multiple sexual partners as a means to enhance men's esteem among their peers. It also leads to men's control over, and decisions about safe sex, including condom use (Townsend et al., 2010).

Societal expectations of men and boys also have an impact on male vulnerability to HIV/AIDS. Social norms about masculinity often assume that men are knowledgeable and experienced when it comes to sexual issues (Gupta, 2002). This can have the negative effect of preventing men from seeking sexual health information or admitting their lack of knowledge about HIV risk reduction. Such norms cause myths about HIV/AIDS to persist (such as the myth that one can be "cured" by having sex with a virgin) (Gupta, 2002). Masculinity norms can also pressure men to have multiple sexual partners, which contradicts HIV/AIDS prevention messages about fidelity, delaying onset of sexual activity in young people, or reducing the number of sexual partners (Interagency on AIDS and Development, 2006).

Social norms about female sexuality make it very difficult for women and girls around the world to protect themselves from sexual transmitted infection. Women and girls are often encouraged to

remain uninformed about sexual matters and/or remain sexually passive (RaoGupta, 2000). The expectations for sexual passivity in women, along with the priority given to male sexual pleasure, also makes it difficult for women to be an equal partner in deciding the terms of sexual activity, including negotiating safer sex practices. Women may be forced to exchange sexual favours for money or gifts in order to meet their basic needs (Interagency on AIDs and Development, 2006).

Johnson et al., (2009), argues that expectations and pressure on men to set sexual agendas, take control and not express vulnerability often mean they engage in sex with limited information about men's and women's bodies and with only fragmented understanding about sexual health and safety. Men find it hard to practice prevention methods, for instance, condoms are often prioritized as prevention, but many men never learn how to use them correctly or resist using them and women cannot control correct condom-use nor insist on their use (Johnson et al., 2009).

2.2 Global and Regional Studies

Current trends (since 2000) in sexual behaviour, revealed in most countries, continue to show that more people are adopting safer sexual behaviours (UNAIDS, 2013). The proportion of 15–24 year olds who have had sex before 15 years is decreasing; condom use has risen amongst people with multiple sexual partners (UNAIDS, 2013). Changes in sexual behaviour, such as delayed sexual debut, high levels of condom use and reductions in multiple partners, are also responsible for significant declines of HIV in high prevalence countries (UNAIDS, 2013). However, there are signs of an increase in risky sexual behaviours in several countries. Recent evidence indicates a significant increase in the number of sexual partners in some countries (Burkina Faso, Congo, Cote d'Ivoire, Ethiopia, Gabon, Guyana, Rwanda, South Africa, Uganda, the United Republic of Tanzania and Zimbabwe), as well as a decline in condom use (in Cote d'Ivoire, Niger, Senegal and Uganda) (UNAIDS, 2013).

The highly generalised HIV epidemic in Southern Africa is distinctively severe. Elsewhere, HIV transmission continues to be strongly associated with especially high-risk activities, such as use of injectable drugs, male-to-male anal sex, and sex work, and the most effective means of prevention are now generally recognized (UNAIDS, 2006). Although HIV has been present for nearly two decades in much of Asia, Latin America and Eastern Europe, extensive heterosexual spread has seldom occurred in those regions (Chin et al., (1998). While there is concern over the possibility

that it could still occur, for the foreseeable future Southern Africa will certainly remain by far the most severely affected region of the global pandemic (Halperin et al., 2006). Such differing patterns of sexual behaviour and the resulting differences in sexual networks have important implications for HIV prevention programmes and outcomes (Halperin et al., 2006).

Consistent use of condoms has been effectively promoted in Asia's organized brothels, most notably in Thailand and Cambodia, as well as, for example, in the Sonagachi project in Calcutta, and among sex workers in the Dominican Republic, Abidjan, Senegal, Harare and elsewhere (Jana et al., 1998). Furthermore, Timberg (2007), argues that in Southern Africa unlike in most of Asia or Latin America such longer-term relationships are typically the ones in which HIV transmission takes place. For years, condom promotion has been a mainstay of donor-funded HIV prevention in Africa, yet a comprehensive review commissioned by UNAIDS concluded that, although condoms are highly effective when used correctly and consistently, 'no clear examples have emerged yet of a country that has turned back a generalized epidemic primarily by means of condom promotion (Halperin & Mah, 2008; Hearst & Chen, 2004; UNAIDS, 2006).

In rural and urban areas of Kenya 11% and 3% of married men and women, respectively, and 26% and 6% of non-married men and women in urban areas were engaged in concurrent partnerships. In rural areas, similar levels were reported, except among married men, of whom 27% were engaged in concurrent partnerships. Among sexually active young men in Kisumu village, 63% of respondents had at least one concurrent partnership in their lifetime. Of those, 49% had 3 or more instances of partnership overlaps (Voeten et al., 2004; Mattson et al., 2007). Doherty et al., (2005) has also found out that, having a sexual partner with concurrent sexual partnerships has emerged as an independent risk factor for acquisition of heterosexually transmitted HIV infection among African Americans. Men with concurrent sexual partnerships were less likely than men without concurrency to have used condoms during last sexual intercourse. Concurrent sexual partnerships were much more likely among men who had a female partner whom they believed had concurrent sexual partners (Doherty et al., 2005).

Mishra et al., (2009), argues that there is limited empirical research on the association between sexual concurrency and the risk of HIV infection. An analysis of cohabiting couples in four countries in sub-Saharan Africa has shown that being in monogamous relationships is associated

with lower likelihood of being HIV-infected (Mishra et al., 2009). Because having sex with a non-spousal partner while cohabiting with another partner is akin to having concurrent sex, this study indirectly shows that concurrency may increase the risk of HIV infection when condoms are not used, the other empirical study, conducted in five cities in sub-Saharan Africa, that has attempted to directly correlate sexual concurrency and HIV prevalence did not find evidence that sexual concurrency is a major determinant of rate of HIV spread (Lagarde et al., 2001). Another study based on four of the five urban communities by Ferry et al., (2001) concluded that sexual concurrency was no more common in high-HIV-prevalence communities than in low-HIV prevalence communities.

The proponents of the concurrency hypothesis have employed methods that systematically overestimate concurrency's contribution to HIV epidemics and favourably interpret data to prove their hypothesis (Sawers & Stillwaggon, 2010). This methods incorrectly include reporting multiple partnerships as if they were concurrent, even when no questions about partnership overlap were asked; removing people who are not deemed to be sexually active from the denominator and then not specifying the denominator (thereby inflating the amount of concurrency reported); omitting the fact that several studies cited as evidence for the concurrency hypothesis actually recruited high-risk individuals; repeatedly and incorrectly citing qualitative studies as if they are quantitative and representative of larger populations; and finally criticizing research methodologies that show no relationship between concurrency and HIV while at the same time repeatedly citing studies of the same design as evidence for the concurrency hypothesis (Sawers & Stillwaggon, 2010; Lurie & Rosenthal, 2010).

Epstein's (2008), argues that much more attention should be paid partner reduction strategies in HIV/ AIDS prevention campaigns, Epstein argues that UNAIDS and other agencies, such as USAID, do not focus sufficiently on partner reduction. She further contends that while circumcision is also an effective but neglected method of HIV prevention, both evidence and critical thought suggest that partner reduction is crucial in multiple and concurrent relationships. Consequently, she believes that there has been irrational failure of UNAIDS and other agencies in handling this issue. The irrationalities she refers to are: 1) UNAIDS policies contribute towards HIV/AIDS prevention are not always based on good science but may be based on religious and political commitments of the United Nations member nations, and on deeply held beliefs about

what will work in HIV/AIDS prevention agencies. 2) UNAIDS policies contribute to the impression that sex, especially in Africa, is in fact “irrational” and that only technical, biomedical solutions will stem the tide of new HIV infections in these populations. In particular, Epstein points to the clear evidence that Southern Africans continue to have sex with multiple partners, moving back and forth between them (Epstein, 2008). Moreover, irrational beliefs about AIDS persists in Africa, including beliefs that traditional medicine is more effective than antiretroviral drugs, and that witches and witchcraft can explain HIV infections. She points to the dispiriting sense that there is no rational approach to HIV prevention in Africa (Epstein, 2008).

2.3 Prevalence of MCP and Serial Monogamous Relationships

According to Hudson (1996), qualitative studies conducted in most Southern Africa countries, show not only extensive societal and individual acceptance of multiple and concurrent partnerships, but also that MCP is a phenomenon that is deeply rooted in the local social, cultural, and economic contexts. The concept MCP is still morally loaded and moralistic, however such biases, unexamined can lead to failure of well-intended interventions and prevention programmes. Thornton (2008), indicates that, the concept assumes like most classical liberal thought that, individuals act with free choice and can choose sex with single (faithful, monogamous) or multiple (promiscuous, licentious) partners, as sensible or ignorant persons making irresponsible risky of safe responsible choices on the basis of irrational lust or rational love. These assumptions set up a contrast between the free but faithful, monogamous, wise, responsible, civil, and a rational individual in sexual unions that is posed against the lust driven, promiscuous, ignorant, irresponsible, and irrational lout or loose woman/man with many partners (Thornton, 2008).

In western countries, although report few sexual partners, multiple recent partnerships are as likely to have been concurrent as they are to have been serially monogamous. The reported gap between serially monogamous partners was short, such that although these partnerships were not behaviourally concurrent, they could be considered as biological concurrent (Mercer et al.,2012) Indeed, the probability of onwards transmission was increased because consistent condom use with both partners was seldom reported. Although partners were more likely to be serially monogamous when condoms were never used with the more recent partner than when condom use with this

partner was reported as inconsistent, there was typically less than a 1-week gap between partners (Mercer et al., 2012).

2.4 Determinants of Multiple and Concurrent Partnerships

In Southern Africa large array of social, cultural, economic, and individual-level factors that contribute to multiple and concurrent partners make reduction of sexual partners a particularly difficult goal for HIV prevention interventions. Some of the factors that have been cited by research as the main contributors of multiple and concurrent partners are as follows: cultural factors; alcohol use facilitating risky sexual behaviour; population mobility and migratory labour patterns; gender norms; couple communication and conflict resolution; transactional sex and inter-generational relationships (Nkambule et al.,2008; Jewkes et al.,2002; Soul et al., 2009).

2.4.1 Cultural Factors

There are many customary practices which contradict the present day norms and values that play role in mitigating the spread of HIV (Matlapeng, 2014). Societal gender norms and culture have a definite bearing on the practice of multiple and concurrent partners, societal and cultural, family, and economic pressures encourage people to remain in risky relationships (Nkambule et al., 2008). In Namibia male respondents reported that the practice of multiple and concurrent partners is especially encouraged by peers, illustrated by fathers, grandfathers and influential public figures, and fits with societal and cultural definitions and concepts of masculinity. Men were referred to as “hunters”, who need to conquer women to prove themselves as heroes (Ministry of Health & Social Services, 2009). When a man has more sexual partners, it is proof of his virility to women and gains him respect from his peers. The practice of multiple and concurrent partners among men may compensate for a lack of achievement in other areas and earn status in the absence other ways to prove manhood. Both men and women also reported adventure and thrill-seeking as a reason for having multiple sexual partners (Ministry of Health & Social Services, 2009). However, cultural norms condemn women who have multiple concurrent partners and are regarded as a “bitches” (Nkambule et al., 2008).

Several other specific cultural and community practices have been documented in parts of Southern that could also contribute to rates of multiple and concurrent partners. These include

customs associated with death and inheritance of wives, female virginity testing beliefs about sex with a virgin as a cure for HIV or AIDS (Leclerc-Madlala 2001; Jewkes et al., 2002). These cultural practices have placed women at greater risk of HIV infection. For example, African cultural practices such as wife inheritance of a deceased brother and the impregnation of an impotent brother 's wife expose women to greater risks of HIV infection (Dyk, 2001). The extent to which multiple and concurrent sexual partnerships are deeply embedded in the local cultural context raises the question as to how amenable to intervention this practice might be.

2.4.2 Alcohol use

The use of high quantities of alcohol is associated with risk behaviours such as violence, and inconsistent and incorrect condom use (Parker, 2011). This is due to the inability to think rationally after consumption of alcohol. Studies have shown that there is an association between alcohol and transactional sex (Kalichman et al., 2007). Alcohol has been related to constructions of maleness, coping with life and providing pathways to sexual encounters. Binge drinking is noted to produce a twofold higher risk for HIV, in comparison to not drinking at all (Chersich & Rees, 2010). Alcohol and drug abuse is related to sexual risk and HIV infection and vulnerability. It also contributes to multiple sexual partners such that people end up picking sexual partners from the drinking spots (Shelton, 2009; Singh et al., 2010; Zabloska et al., 2010).

Alcohol use promote inconsistent or incorrect condom use, despite knowledge of the associated risk for HIV this posed. In transactional sexual relationships the balance of power lies with the “paying” (male) partner in determining the conditions of sex, specifically whether condoms are used (Townsend et al., 2010; Johnson et al., 2009). These findings suggest that at the proximal, individual level, condom use is inextricably linked to both transactional sex and excessive alcohol use, and both of these behaviours increase the risk of HIV infection and transmission among those involved in the (multiple) sexual transactions (Townsend et al., 2010). Although alcohol abuse is a generalised problem, it is important to note that emerging trends in the use of recreational drugs in Southern Africa are also potentially important for HIV prevention. In Cape Town a subgroup of female methamphetamine users were six times more likely to have unprotected sex (Kalichman, 2007).

2.4.3 Poor Couple Communication, Conflict Resolution and Unmet Sexual Expectations and Needs

There are a number of reasons to engage in these extra relationships and these include dissatisfaction, insufficient and unsatisfactory communication, violence, and family discord (Jana et al. 2008; Nkambule et al., 2008). Soul et al., (2009), found that there is extensive societal and individual acceptance of multiple partnerships in Namibia. Reasons cited by research respondents for their risky behaviours of MCP were as follows: unmet sexual expectations and needs; poor couple communication; conflict resolution; among others as facilitating risky sexual behaviour. Respondents said when partners cannot sexually satisfy each other, one or both look outside their relationship for sexual satisfaction (Soul et al., 2009).

One of the key factors leading to MCP among men and women in rural and urban areas in South Africa is little communication within couples about sexual needs and desires, but sex is felt to be the thing that makes a relationship work (Jana et al., 2008). The issue of poor couple communication was also mentioned in the context of differing sexual relationships, respondents said a lover would not complain or give them stress the way that their main partner would. Poor communication and conflict resolution skills might also lead to lack of condom use in such sexual relationships and very high possibilities of HIV transmission (Jana et al., 2008). Nkambule et al. (2008) point out that among men, “cheating” on a sexual partner was considered to be a means of asserting independence from control. The issue of getting revenge was also said to be a reason for MCP, because if one partner cheats, then the other might retaliate by cheating as well (Nkambule et al., 2008).

2.4.4 Transactional Sex and Inter-Generational Relationships

Transactional relationships are partnerships driven by exchange of sex for social and financial gains from different partners, occurring with a casual or informal sexual partner. However, some partnerships may be longer-term (Nkambule et al., 2008). Transactional sex among young females is usually, although not exclusively, conducted with older partners. These relationships often highlight gender, social, and instrumental inequality as well as certain cultural norms. It reproduces risks of exposure to multiple sexual partnerships, unsafe sexual practices like inconsistent condom use and is associated with prevalent STIs and HIV infection (Goldberg, 2012; Epstein, & Kim

2007). Transactional sexual practices intersect with the selection of partners who are much more likely to be HIV positive as a product of their being in a higher HIV prevalence pool (e.g. males who are 10 or more years older), but also high risk males in general. Johnson et al., (2009), states that, concurrent partners in urban areas are linked to consumption or materialism, whereas in rural areas they are linked to survival.

However, transactional sex is also perceived as providing benefits to both partners like, romantic love or seeking a long-term partner being understood as absent from the relationship and in some of these relationships there are no emotions attached to them (Hawkins et al., 2005). Hawkins et al., (2005), found that in Mozambique transactional sex partnerships comprised of trusted same age boyfriends, partners for sexual pleasure, older married men and lovers, with the latter two categories incorporating transactional elements. Relationships are overall long-term, and young females perceive themselves as relatively empowered within these relationships (Hawkins et al., 2005).

Furthermore, Nkosana & Rosenthal (2007), found that in Botswana, young females were not passive partners in age-disparate sexual relationships, with pleasure, enjoyment, love and equal partnership being noted as components of such relationships. Some young females reported relatively high decision-making power to determine HIV prevention practices such as condom use, while for others, coercion, manipulation and unsafe sex were relationship characteristics (Nkosana & Rosenthal, 2007). This illustrates that vulnerabilities flowing from age-disparate relationships do not manifest uniformly for all young females, although there is a general pattern of heightened risk as a product of power differentials related to age differences and gender (Nkosana & Rosenthal, 2007; Dunkle et al., 2007).

Avoiding or rejecting intergenerational relationships by young females is related to having a strong sense of self-worth, accepting economic circumstances and having a desire to maintain a sense of decision-making power (Packer, 2011). It is arguable that sex is commodified in a context where needs and wants overthrow concerns about vulnerability to HIV infection. While programmes should focus on both partners in transactional and intergenerational sexual relationships, families and communities should highlight and discourage the short-term benefits of such relationships, while positively reinforcing relationships that do not follow this format (Packer, 2011).

2.5 Factors influencing condom use

In all types of sexual relationships characterized by fewer emotional and affiliative qualities, men are ten times more likely than women in similar relationships to consistently use a condom. In relationships marked by more emotional connections, consistent condom use is the same for men and women (Katz et al., 2010). Women in exclusive sexual relationships perceive themselves to be at low risk for STDs, have low intentions to use condoms, and are less likely to use condoms (St. Lawrence et al., 1998). Cohabitation and emotional closeness to a partner are associated with a reduced likelihood of developing intentions to use condoms (Santelli et al., 1996). People in multiple and concurrent relationships are likely to use condoms with their primary partner they perceived themselves to be at high risk for STDs and consistent condoms use may also be primarily for non-marital sexual relations. Perception about the benefits and barriers of condom use are likely to influence whether or not someone will use condoms during sexual intercourse (Posner et al., 2001).

Higher coital frequency in all types of sexual relationships may also result in inconsistent condom use. Increased coital frequency reflect increased opportunity for condom non-use for at least one coital event. The often allude to disadvantages of condom use such as inconvenience, messiness, and interference with sexual with pleasure might be magnified when coitus is more frequent with a specific partner (Hammer et al., 1996). It is also possible that higher coital frequency is associated with greater perceived need for contraception rather than STD prevention. This would lead to the use of non-barrier contraceptives and decreased emphasis on condom use within the relationship especially in monogamous relationships. Factors that imply some degree of enduring connection such as having a child together or perceiving the relationship in emotionally positive terms significantly reduce the odds of consistent condom use (Katz et al., 2010). Low level of knowledge about the correct condom use is a predictor of non-use of condoms People who have multiple partners, used tobacco, alcohol, and illicit drugs most often were least likely to use condoms (Adih and Alexander, 1999).

Many people especially in monogamous relationships believe that faithfulness and condom use are mutually exclusive (Green, 2011). Women are often powerless to insist on the use of condoms

because it signals to their male partners a lack of trust. Rates of HIV transmission are high in many countries in sub-Saharan Africa, even though rates of condom use are high (Hearst and Chen, 2004). In a generalized HIV epidemic decline in HIV prevalence has been a result reduction in multiple and concurrent partnerships and fidelity reversed as a result of increased / consistent condom use. measures of condom use might provide some indication of use in general, they may not sufficiently assess use among multiple and concurrent partnerships. There is seldom any indication from studies of heterosexual populations whether condoms are used effectively (Hearst and Chen, 2004).

Promotion of monogamous relationships and fidelity was the primary component of the ABC campaign in Uganda, the three major interventions that led to a decline in the HIV rate were abstinence (delay of sexual debut), being faithful, and condoms as a last resort. Thailand was also able to decrease its HIV prevalence rate because men had fewer commercial and casual sex partners after public campaigns. A reduction in partners has also been successful in gay communities in Europe and the United States (Green, 2011; Epstein, 2008).

2.6 Studies in Botswana

Botswana is among countries in Southern Africa with the highest burden of HIV with a national HIV prevalence rate of 16.9% and an unadjusted incidence rate of 2.4 % for the general population (aged 18 weeks and over) Statistics Botswana, (2013). The government continues to increase the budget allocated for the national response and has adopted critical policies such as the National Policy on HIV and AIDS and the Public Health Act as a way of responding to current needs in the fight against the HIV epidemic (Matlhare, 2013). Part of the reason for the high prevalence in Botswana may lie in the occurrence of multiple sexual partnerships, whether serial or concurrent (Halperin & Epstein, 2004). Prevention efforts in Botswana arguably have put less emphasis on partner reduction and faithfulness, compared to other program components, such as awareness and education about HIV, condom use, and testing (Allen & Heald, 2004).

Studies in Botswana have used BIAS data to mainly measure percentage of condom use, HIV prevention, incident and prevalence. Cartel et al., (2007), assessed associations between concurrency and socio-demographic characteristics to identify groups more likely to report this behaviour. The study found out that sexually active respondents reported having had a concurrent

partnership with any of their last three partners over the last 12 months (Carter et al., 2007; Meyerson et al., 2003). Men are more likely than women to engage in MCP by most estimates. Knowledge that concurrent or overlapping partnerships are riskier is very low (17%). Drivers of MCP are different for men and women and include beliefs, attitudes, self-efficacy and alcohol use (Gournenec, 2007).

There is evidence suggesting that alcohol abuse remains the most common form of primary substance abuse by youth in Botswana (Phorano et al., 2005; Botswana Alcohol AIDS Project 2004). This was corroborated by Seloilwe et al. (2013), who indicated that in Botswana youth of both sexes engage in risky sexual behaviours that put them at risk of contracting HIV, STIs and unplanned pregnancies. The study purports that risk of sexual behaviour was associated with use of alcohol and drugs especially dagga, this suggest that in countries like Botswana that alcohol remains a major contributing factor to the spread of HIV in Botswana as people often engage in sex especially when they are under the influence of alcohol (Seloilwe et al., 2013). This indicates that there is a close link between alcohol abuse and perilous sexual behaviours like unprotected sex, engaging in sex for money or exchange for alcohol.

Matlapeng (2014), found out that financial issues, the apparent need for sexual variety, quest for material possession, and the impact of unemployment, migration and alcohol abuse are seen as some of the major factors underlying MCP in Botswana. The “*O icheke*” Multiple Concurrent Partnership campaign was positively viewed as playing a key role in addressing the apparent knowledge gap regarding the impacts of these partnerships and in changing people ‘s attitudes towards MCP and discouraging wide sexual networks (AIDS Star One, 2010).

Most of the studies mentioned above does not show the relationship between types of sexual relationships, and background characteristics. This studies have improved our understanding of how concurrency aggravate HIV transmission but little has been done on the association between types of sexual relationships and condom use. Therefore, there is need for further research to establish the association between types of sexual relationship, condom use and socio- economic demographic characteristics, and the extent to which types of sexual relationships influence condom use and background variables.

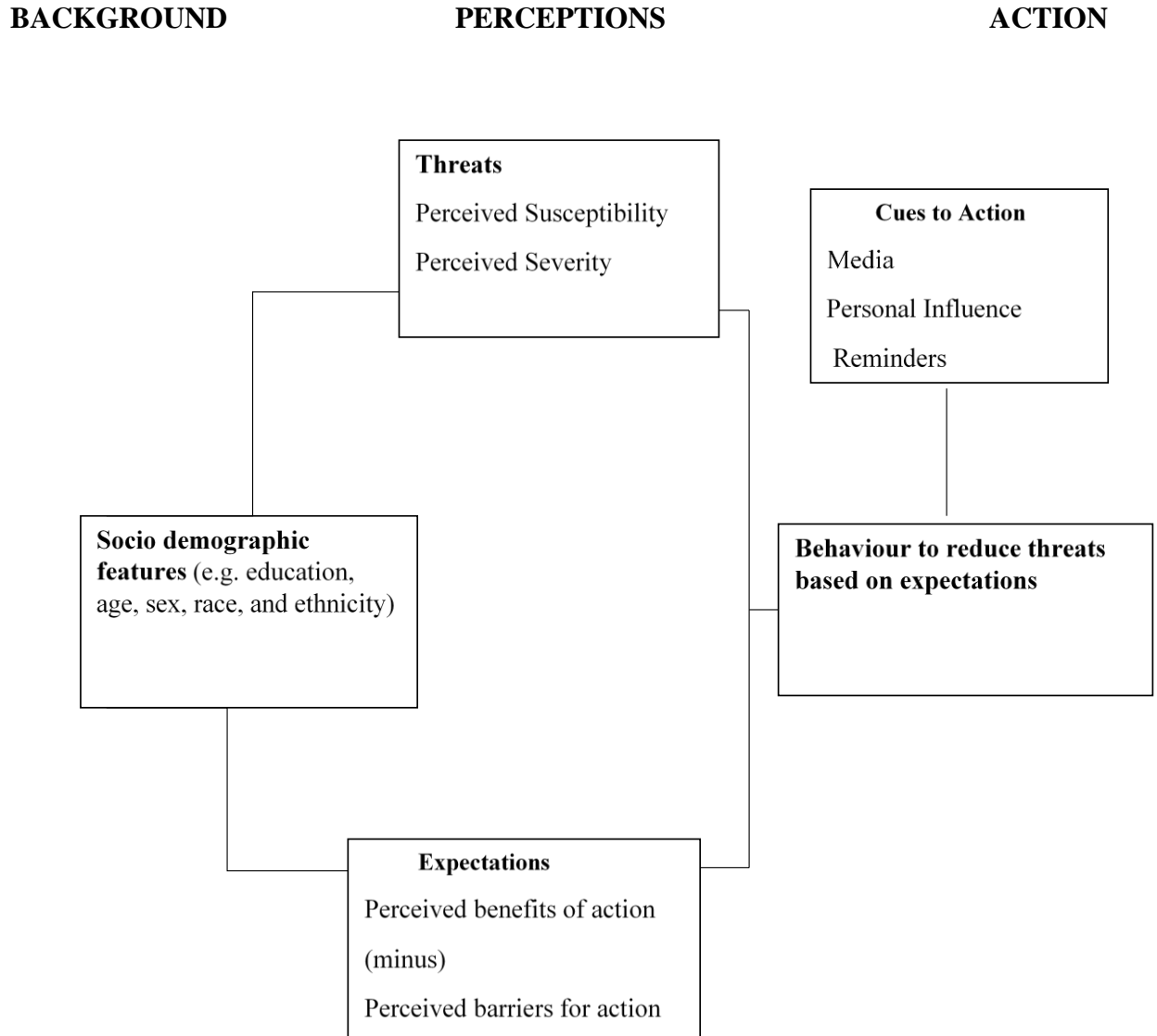
2.7 Conceptual Framework

This study was guided by the Health Belief Model. Developed in the 1950s, the Health Belief Model is a psychological model that attempts to explain and predict health behaviours. It mainly focuses on attitudes and beliefs of individuals. The HBM was part of an effort by social psychologists in the United States Public Health Service (Hochbaum, 1958; Rosenstock et al., 1988; Janz et al., 1984) who attempted to explain lack of public participation in health screening and prevention programmes. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviours, including sexual risk behaviours and the transmission of HIV/AIDS, and Condom use (Conner & Norman, 1996). In the HBM, the possibility that a person will follow a preventive behaviour is influenced by their subjective weighing of the costs and benefits of the action. The key variables of the HBM are as follows (Rosenstock, 1960; Strecher, 1994; Becker, 1974):

- ❖ **Perceived susceptibility:** the person's judgment of his or her risk of contracting the condition.
- ❖ **Perceived seriousness of the condition:** the severity of the condition and its impact on life style. The combination of perceived susceptibility and seriousness is termed perceived threat (see Figure 1).
- ❖ **The perceived threat:** has a cognitive component and is influenced by information. It creates a pressure to act, but does not determine how the person will act. That is influenced by the balance between the perceived efficacy and cost of alternative courses of action.
- ❖ **Perceived benefits of an action:** will the proposed action be effective in reducing the health risk?
- ❖ **Perceived barriers to action:** How do these benefits compare to the perceived costs of action? Are there barriers to action? Will it involve expense, pain, or embarrassment?
- ❖ **A stimulus or cue to action:** When a person is motivated and can perceive a beneficial action to take, actual change often occurs when some external or internal cue (e.g., a change in health, the physician's advice, or a friend's death) triggers action. (Janz et al., 1984).
- ❖ **Other Variables:** Diverse demographic, socio-psychological, and structural variables that affect an individual's perceptions and thus indirectly influence health-related behaviour.

- ❖ **Self-Efficacy:** The belief in being able to successfully execute the behaviour required to produce the desired outcomes (Bandura, 1977).

Figure 1: Health Belief Model (diagrammatic presentation)



Source: Perloff, 2001

The basic argument of HBM is the assumption that an individual's characteristics, perceptions, environment and previous experiences are key factors which shape their actions and perceptions of the risks and severity of the outcomes of their behaviour, such as indulging in sexual risk behaviours like inconsistent use of condoms during sexual intercourse; having multiple sexual

partners; taking alcohol/drugs; and engaging in transactional and intergenerational sex (FHI, 2004).

The most important element of the model is to recognize and label one's behaviour as risky in prompting people to adopt a healthier behaviour. The greater the perceived risk, the greater the likelihood that people will engage in behaviour change to decrease the risk (FHI, 2004). The constructs of the theory in this study helps to understand the reasons why people practice MCP. The variable of perceived benefits highlights the usefulness of a new behaviour in decreasing the risk behaviour (FHI, 2004). In essence, it is difficult for people to change their risk behaviour, for example, reducing partners if they feel the new behaviour is not beneficial. For example, assessing the cost and benefit of MCP or reducing partners will lessen involvement in activities that can increase the risk of HIV infection. In order for a new behaviour to be adopted and sustained obstacles to behaviour change have to be dealt with. The process of taking action also depends on level of self-esteem and self-efficacy to make health related changes (FHI, 2004).

HBM also attempts to explain and predict health behaviour by focusing on attitudes and beliefs of individuals. It recognizes internal and external factors that help individuals to adopt negative or positive behaviours or that may hinder or facilitates the labelling of one's behaviour (Family Health International, 2004). The HBM can also be used to evaluate health education campaigns in Botswana like "*O icheke*" campaigns which may cause people to examine and change their sexual activities. This model is relevant for explaining participation or lack of participation in "*O icheke*" campaign because if people are not aware of their risk behaviours it becomes difficult to pay attention to MCP messages and adopt safe practices such as consistent condom (Matlapeng, 2013).

The spread of information through mass media has fuelled community discussion and can easily reach individuals in both urban and rural areas. Information dissemination which focuses on personalizing risks, highlighting the costs and benefits of MCP, and addressing the reasons people give for engaging in it, and also can help in promotion of correct and consistence condom use to raise awareness and emphasize behavioural change (AIDS Star One, 2010). Television series such as *Morwalela* aired for the first time in April in 2010, set within a fictional Botswana village, it brings to life the sexual networks that exist within society and the risky behaviours they support.

(AIDS Star One, 2010). Mass media have given people a means to start discussing difficult issues relevant to MCP and condom use.

2.7.1. Applications of the HBM to AIDS-Related Risky Sexual Behaviours and Condom use

The HBM suggests that, for individuals who exhibit high-risk behaviours, perceived susceptibility is necessary before commitment to changing these risky behaviours can occur. For individuals who do not believe they are at risk, the benefits or barriers to an action are irrelevant (Janz & Becker, 1984). Self-efficacy has been studied in relation to HIV protective behaviours and defines an individual's perceived ability to carry out a behaviour believed to be necessary to prevent infection with HIV (Janz and Becker, 1984). However, studies addressing HIV /AIDS risky behaviours show that people still have multiple and concurrent partners, this act of behaviour is seen to be a very risky behaviour that fuels HIV transmission, relationships could be long lasting or casual sex, where most couples eventually stop using condoms. For instance, all research participants from a study carried by Matlapeng (2014), know that transmission will occur, if one partner is HIV positive and have sex without the use of condoms.

Research literature has also shown that there is high level of knowledge on HIV among those who have concurrent partners (Matlapeng, 2014; Gourvenec et al., 2007). A study by Gourverne (2007) indicates that though Batswana are generally highly HIV literate, a significant number of men are more likely than women to report risky behaviour such as inconsistency condom use with casual partners and having more than one concurrent sexual partner than women. This suggests that knowledge about transmission of HIV has not led to low risk behaviour. This confirms the Health Belief Model that changes of risky behaviour is a process that one has to assess and deem it necessary to change or adopt safe behaviour. The relationship between perceived susceptibility to negative outcomes of risky sexual behaviour, such as becoming HIV-positive and contracting sexually transmitted diseases (STDs), varies across studies. Some researchers have found a significant relationship between condom use and perceived susceptibility (Hounton, et al., 2005; Steers, 1996), whereas others haven't found the relationship (Volk & Koopman, 2001).

Perceptions of AIDS severity address the perceived costs of being HIV-positive. Perceived seriousness, in this case, refers to personal evaluations of the probable biomedical, financial, and social consequences of contracting HIV and developing AIDS. Some might argue that asking

about AIDS severity would be a waste of respondents' time, as it might be assumed that everyone would report AIDS to be an extremely severe disease. Most studies in the research literature have not included measures on HIV/AIDS perceived severity (Rosenstock, et al., 1994).

Associations of perceived benefits and barriers to AIDS are identified, but results with behaviours are inconsistent. In a study by Gourvenec et al., (2007) shows that condom use among respondents aged 15-34 was motivated by the perceived value of condoms to prevent pregnancy, as well as avoidance of HIV/AIDS. For men, the behavioural determinants that mostly correlated with MCP behaviours were beliefs in the benefits of having multiple partners and the belief associated with the risk of MCP that as long as condoms are used having multiple concurrent partners should not be a problem (Gourvenec et al., 2007). This suggests that most men were convinced about the benefits of using condoms, but these perceived benefits were not associated with behaviour. Several researchers have found a significant relationship between barriers and condom use (Hounton, et al., 2005; Volk & Koopman, 2001). For instance, barriers such as reduction of sensation and pleasure were associated with condom use, as well as worry about negative reactions from sexual partners, for example, although condoms were available in Uganda for family planning in the 1980s many people were uneducated about condoms and reluctant to use them (Kirby, 2008). In Uganda condoms were not widely available, they were expensive and not used frequently. However, after condoms were promoted through social marketing campaigns, many myths were corrected and condoms became available, people began using them more frequently and the social norm for many young people was to use condoms to avoid contracting HIV (Kirby, 2008).

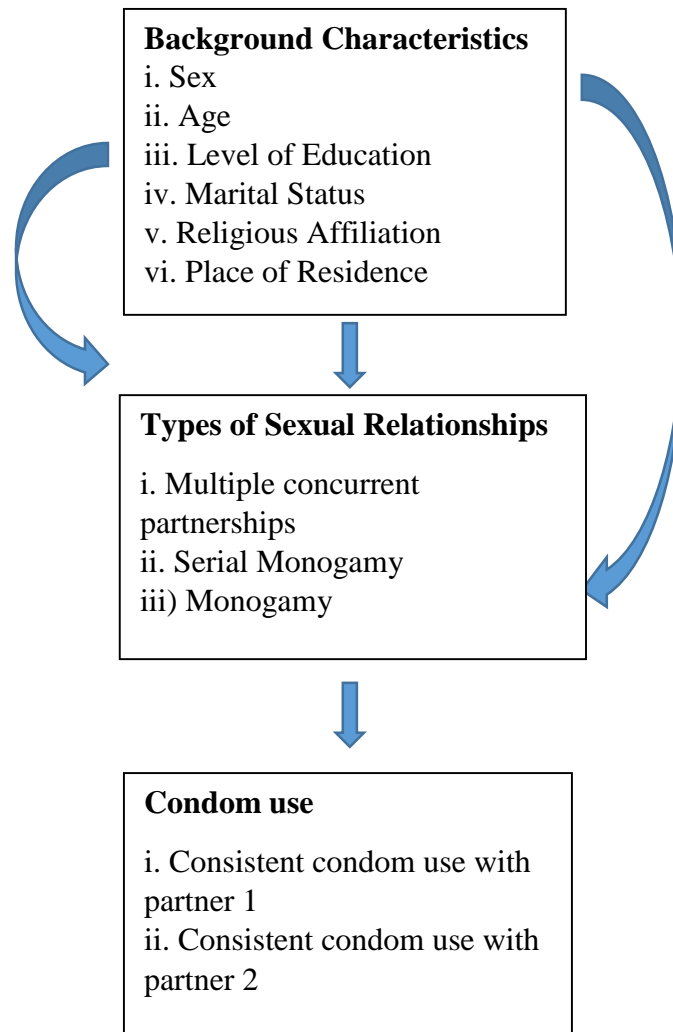
Taylor (1990), points out that resistance to condoms use in Rwanda had nothing to do with ignorance, but with a very specific social and cultural dimension of Rwandan sexuality. Many Rwandans believe that the flow of fluids involved in sexual intercourse and reproduction represent exchange of gifts of self which they regard as being of the almost important in a relationship. Using condoms will disturb the flow of this fluids. Self-efficacy was a significant predictor of sexual behaviours that included increased condom use, decreased number of sex partners, and decreased number of sexual encounters (Steers et al., 1996; Gourvenec, et al., 2007).

In summary, many research studies have identified relationships of HBM constructs with safe sex behaviours. Although results have varied, support for significant relationships between perceived susceptibility, perceived benefits and barriers, and perceived self-efficacy are apparent (Hounton, et al., 2005) These concepts have been used in interventions developed to decrease risky sexual behaviours. Self-efficacy was increased by identifying prevention strategies, including negotiating condom use, reducing numbers of sexual partners (Steers et al., 1996). Condom use increased significantly in the two intervention areas and, this is supported by quantitative studies of sexual behaviour which indicates that after learning that HIV was sexually transmitted, people stopped having sex with many partners outside marriage (Kirby, 2008).

One major strength of individual behaviour models such as the HBM is that they can be used to predict individual behaviour and hence come up with preventive measures to that particular behaviour. However, they are limited in that they overgeneralize contextual forces that may influence individual behaviour (Mberu, 2010). Furthermore, the models lack in the sense that they do not satisfactorily integrate social and cultural norms and peer influences on people's decisions regarding their health-related behaviours (Brodie, 1994). Moreover, the evaluation of interventions based on HBM have shown consistent disappointing effects on high risky behaviour such as inconsistent use of condoms, hence giving impetus to the criticism that an individual is an inadequate unit of analysis (Brodie, 1994).

2.8 Diagrammatic Representation of the Conceptual Framework

Figure 2: The interrelationships of background characteristics, types of sexual relationships and condom use.



The analytical framework of this study has three components namely: Background characteristics, types of sexual relationships and condom use. The following are demographic background variables used for this study: age; education level; marital status; religious affiliation and place of

residence. Types of sexual relationships are: Multiple concurrent partnerships, serial monogamy and monogamy. Condom use refers to consistent condom use in the past twelve months with the first and second partner.

The study framework shows the associations between respondent's socio demographic variables, types of sexual relationship and condom use. The framework shows that background characteristics influence types of sexual relationships and condom use. It also shows that condom use is influenced by types of sexual relationships.

Literature has shown that there is a significant relationship between multiple sexual partnerships and socio background characteristics such as sex, age, education level, marital status, religious affiliation and place of residence. People in urban and urban villages are more likely to have multiple and concurrent partners than rural men and women (Mshisha et al. 2008; Jana et al., Johnson et al., 2009). It has been observed that younger people are more likely to engage in higher risky behaviour and older ages have been associated with an inclination toward longer-term, monogamous relationships (Parker et al., 2010; Chirwa & Chizimbi, 2009). Quantitative studies conducted in Botswana have indicated a significant number of men are more likely than women to report risky behaviour such as inconsistent condom use with casual partners and having more than one concurrent sexual partner than women (Gourvenec et al. 2007). Therefore, this study is also expecting men to have multiple and concurrent partners than females.

Studies have found that males are less likely to report consistent condom use, compared to females (Jewkes et al., 2006). Respondents who had attained primary education were more likely to use condoms consistently than those with non-formal education. Place of residence is one of the factors that influence number of sexual partners and consistent condom use, respondents who resided in urban villages and rural areas are less likely to have used condoms consistently compared to those who reside in urban areas. The analytical framework shows that there is an association between types of sexual relationship and condom use, as stated by other researchers (Letlamo, 2010; Do & Meekers, 2009 and Halperin & Mah, 2008).

CHAPTER THREE: METHODOLOGY

3.1 Source of Data

This study uses data derived from the 2013 Botswana AIDS Impact Survey IV, which is a follow-up to the 2001, 2004 and 2008 Botswana AIDS Impact Surveys. BAIS IV survey was designed to provide information on the behavioural patterns of the population aged 10 through 64 years and the HIV prevalence and incidence rates among those aged 6 weeks through 64 years at national, district and sub-district level. Information obtained from BIAS IV will be used for continuous strategic prevention and national HIV programme planning and guide future HIV and AIDS research (Statistics Botswana, 2013).

3.2 Sampling Frame and Design

The sample frame for BAIS IV was based on the 2011 Botswana Population Housing Census. A stratified two-stage probability sample design was used for the selection of the BAIS IV sample (Statistics Botswana, 2013). The first stage was the selection of enumeration areas (EAs) as Primary Sampling Units (PSUs) selected with probability proportional to measures of size (PPS), where measures of size (MOS) were the number of households in the EA as defined by the 2011 Population and Housing Census (Statistics Botswana, 2013). In all 301 EAs were in the sample. At the second stage of sampling, the households were systematically selected from fresh list of occupied households prepared at the beginning of the survey's fieldwork (i.e. listing of households for the selected EAs) (Statistics Botswana, 2013).

Overall 3488 households were drawn using the systematic random sampling method. A total number of 9,807 individuals aged 10-64 were sampled and 8,231 were successfully interviewed, EA for estimates for response rates showed that 83.9% of persons aged 10 to 64 answered individual questions (Statistics Botswana, 2013). The data also show that 13,808 of population 6weeks and above participated in HIV testing, and 10,140 respondents provided blood samples for HIV testing, yielding an individual response rate of 73 percent (Statistics Botswana, 2013).

3.3 Sample

From the BIAS IV data only 5,175 respondents who had had sexual intercourse during the 12 months leading to the survey and were aged between 15 and 54 were selected for this study.

3.4 Measurement of variables

3.4.1 Dependent Variables

The dependent variables in this study is Condom use, condom use consistency was measured by responses to questions that sought to find out if the respondents had always used condoms with their first and second sexual partners. Questions to condom use were responded to as “Always” “Sometimes and “Never” the last two categories were combines to create a category called “Inconsistent” condom use, while the first category was used to represent “Consistent” condom use.

3.4.2 Independent variables

The independent variable is Types of sexual relationships, which is classified as a) Monogamy b) Serial monogamy c) Multiple & Concurrent partnerships.

3.4.3 Control variables

- i) The following background variables were used as control variables: age; education level; marital status; religious affiliation; place of residence.
- ii) Other control variables included the use of condoms to prevent HIV and HIV testing. The use of condoms to prevent HIV was measured through responses to a question that sought to find out if respondents knew that consistent condom use can prevent HIV transmission HIV testing was measured by some responses to a question that sought to find out if respondents have tested for HIV or not.

3.5 Data and Methods

The data were analysed using Statistical Package for the Social Sciences (SPSS). For each objective, frequencies, cross tabulation were used to analyse the data such as prevalence of types of relationships. Cross tabs were used to initially explore possible bivariate associations between types of sexual relationship and respondent’s socio demographic variables. Finally, binary logistic regression was used to explore the association between types of sexual relationships and condom use.

CHAPTER FOUR: ANALYSIS OF RESULTS

4.1 Sample Description

Table one below shows the sample socio demographic characteristics. More than half (53.8%) of the respondents were female.

Table 1:Percentage Distribution of the sample population

Variable	Number	Percentage
Sex		
Female	2392	46.2
Male	2783	53.8
Age		
15-24	969	19.6
25-34	1835	37
35-44	1220	24.6
45-54	645	13
55 and above	285	5.8
Education		
None/ Non Formal	417	8.1
Primary	882	17.0
Secondary	2603	50.3
Tertiary	1273	24.6
Residence		
Towns/Cities	2116	40.9
Urban villages	1287	24.9
Rural	1772	34.2
Marital Status		
Never married	2130	56.8
Living together	1506	40.1
Once married	117	3.1
Religion		
Christianity	4419	85.7
Other religions	220	4.3
No religion	519	10

Almost six out of every ten (56.6%) of the respondents were below 35 years of age, just above two-fifths (43.4%) of the respondents were aged between 36 and 64 years of age. Half (50.3%) had attended secondary education and a quarter (24.6%) had tertiary education, followed by just under a fifth (17%) of the respondents had primary education, whereas those with non- formal education accounted for only 8.1%.

The results show that two fifth of the respondents dwelled in urban areas (40.9%), and more than a third resided in rural areas (34.2%), and quarter dwell in urban villages (24.9%). Close to six out of every ten (56.8%) of the respondents were never married, two fifth (40.1%) were living together, while 3.1% were once married. Most of the respondents 85.7% were Christians, followed by those who did not ascribe to any religion 10% and those who ascribed to other religions (Islam, Baha’i, Hinduism, and Badimo) 4.3%.

4.2 Types of sexual relationship and HIV selected risk behaviours

Table 2: Percentage distribution of Types of sexual relationships and HIV selected risk Behaviours

Variable	Number	Percentage
Type of sexual partnership		
Monogamy	4137	89.8
Serial Monogamy	111	2.4
MCP	361	7.8
Have you ever tested for HIV		
Yes	4555	89.3
No	543	10.7
HIV can be reduced by always using a condom correctly		
Yes	4836	94.9
No	262	5.1
Condom use with partner 1 in the last twelve months		
Yes	3056	59.1
No	2119	40.9
Condom use with partner 2 in the last twelve months		
Yes	596	79.5
No	154	20.5

Table 2 shows the types of sexual relationships, knowledge of HIV, condom use and HIV testing. The results indicate that almost nine out of every ten (89.8%) respondents were in monogamous relationships, less than one tenth (7.8%) had multiple concurrent partners and only 2.4% had serial monogamous relationships. Close to nine out of every ten (89.3%) of the respondents had tested for HIV. More than nine out of ten (94.9%) of the respondents believed that if condoms are used

correctly they can reduce transmission of HIV virus, only 5.1% of the respondents didn't believe that if condoms are used correctly they can reduce transmission of HIV virus.

Over half of respondents always used a condom with their first partners (59.1%), two fifth (40.9%) of the respondents did not use a condom consistently. Most of the respondents in the survey (79.5%) always used a condom with their second most recent partners, just two out of every tenth (20.5%) sometimes used a condom with their second partner.

4.3 Association between Types of Sexual Relationships and background characteristics

Table 3: Types of Sexual Relationships by background characteristics

Variable	Monogamy		Serial Monogamy		MCP		Total	Total
	Number	Percent	Number	Percent	Number	Percent		
Sex								
Female	2409	94.6	35	1.4	103	4.0	100	2547
Male	1728	83.8	76	3.7	258	12.5	100	2062
		X ² =144.36		df=2		p=0.000		4609
Age								
15-24	724	84.4	37	4.3	97	11.3	100	905
25-34	1417	86.1	56	3.4	173	10.5	100	1709
35-44	1027	92.9	12	1.1	67	6.1	100	1147
45-54	549	96.5	3	0.5	17	3	100	592
55 and above	243	97.2	1	0.4	6	2.4	100	256
		X ² =106.72		df=8		p=0.000		4609
Education								
None/non-formal	355	96.7	0	0	12	3.3	100	367
Primary	736	94.2	11	1.4	34	4.4	100	781
Secondary	2051	88.6	64	2.8	200	8.6	100	2315
Tertiary	995	86.8	36	3.1	115	10	100	1146
		X ² =51.88		df=6		p=0.000		4609
Residence								
Towns/Cities	1663	88.9	56	3	152	8.1	100	1871
Urban villages	1012	88.5	30	2.6	101	8.8	100	1143
Rural	1462	91.7	25	1.6	108	6.8	100	1595
		X ² =12.52		df=4		p=0.000		4609
Marital Status								
Never married	1587	84.4	85	4.5	208	11.1	100	1800
Living together	1388	91.9	18	1.2	105	6.9	100	1511
Once married	98	89.9	6	5.5	5	4.6	100	109
		X ² =55.35		df=4		p=0.000		3500
Religion								
Christianity	3569	90.3	88	2.2	295	7.5	100	3952
Other religions	164	85.4	9	4.7	19	9.9	100	192
No religion	391	86.9	14	3.1	45	10	100	450
		X ² =10.97		df=4		p=0.000		4594

Table 3 shows the chi square results on the association between types of sexual relationships and background characteristics. The results show that there is a significant association between types of sexual relationships and socio demographic variables such as sex, age, education, place of residence, marital status and religion at 0.05 significant level.

The results show that 94.6% of females and 83.8% of males were monogamous relationships. (X²=144.36, df =2 p=0.000). The proportion of respondents who practiced monogamy increased with age from 84.4% and 86.1 % among the respondents between 15-34 years to 92.9%, 96.5%

and 97.2% among respondents of age groups 35-44, 45-54 and 55 and above respectively ($X^2=106.72$, $df= 8$, $p= 0.000$).

Furthermore, monogamous relationships decreased with levels of education from 96.7%, 94.2%, 88.6% 86.8% among respondents with none/non- formal education, primary education, secondary and higher education respectively ($X^2=51.88$, $df= 6$, $p= 0.000$). The proportion of respondents who practiced monogamy was highest among those residing in rural areas (91.7%) than those residing in urban areas (88.9%) and those residing in urban villages (88.5%) ($X^2=12.52$, $df= 4$, $p= 0.000$).

The results show that 91.9% of respondents who were in cohabiting unions practiced monogamy, followed by 89.9% who were once married and 84.4% were never married ($X^2=55.35$, $df= 4$, $p= 0.000$). Monogamous relationships were higher amongst respondents who were Christians (90.3%) than amongst those who did not belong to any religion (86.9%) and amongst those who belonged to other religions (85.4%) ($X^2=10.97$, $df= 4$, $p= 0.000$).

On the association between serial monogamy and background characteristics the results show that 1.4 % of females and 3.7% of males were serial monogamous relationships. ($X^2=144.36$, $df= 2$, $p=0.000$). The proportion of respondents in serial monogamous relationships (7.7%) was higher among respondents aged 35 and below than among other age groups ($X^2= 106.72$, $df= 8$, $p= 0.000$). Furthermore the proportion of respondents in serially monogamous relationships increased with level of education from 0%, 1.4%, 2.8%, 3.1% among respondents with none/non- formal education, primary education, secondary and higher education respectively($X^2=51.88$, $df= 6$, $p= 0.000$).The proportion of respondents who practiced serial monogamy was highest among those residing in cities and towns (3%) followed by those residing in urban villages (2.6%) and is lowest among those residing in rural areas (1.6%) ($X^2=12.52$, $df= 4$, $p= 0.000$).

The results show that 5.5% of respondents who once married practiced serial monogamy, followed by 4.5% who were never married and only 1.2% were living together ($X^2=55.35$, $df= 4$, $p= 0.000$). The proportion of respondents in serial monogamous relationships were higher amongst respondents who belonged to other religion (4.7%) than amongst those who did not belong to any religion (3.1%) and lower amongst Christians (2.2%) ($X^2=10.969$, $df= 4$, $p= 0.000$).

Figure 3: Percentage of respondents who have multiple concurrent partners by sex

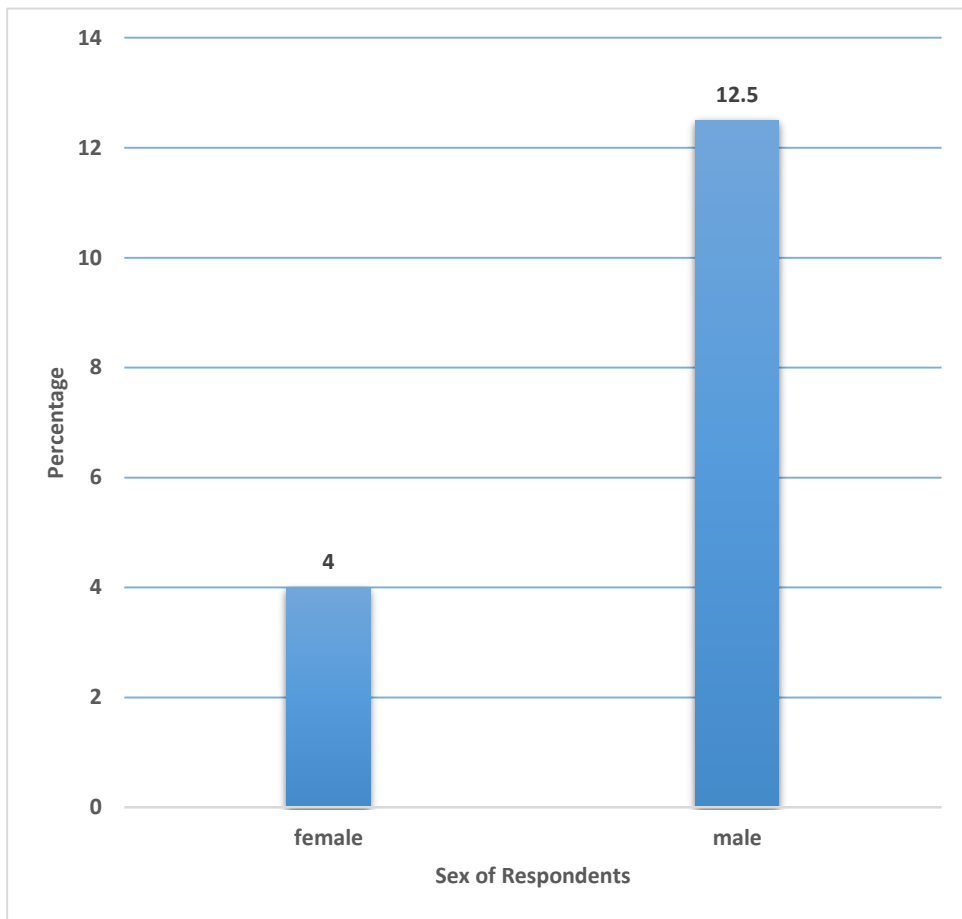


Figure 3 shows the association between MCP and sex. The figure shows that a higher proportion among males (12.5%) than females (4%) were involved in multiple concurrent sexual relationships ($X^2=144.36$, $df=2$ $p=0.00$).

Figure 4: The percentage of respondents who practice MCP by age

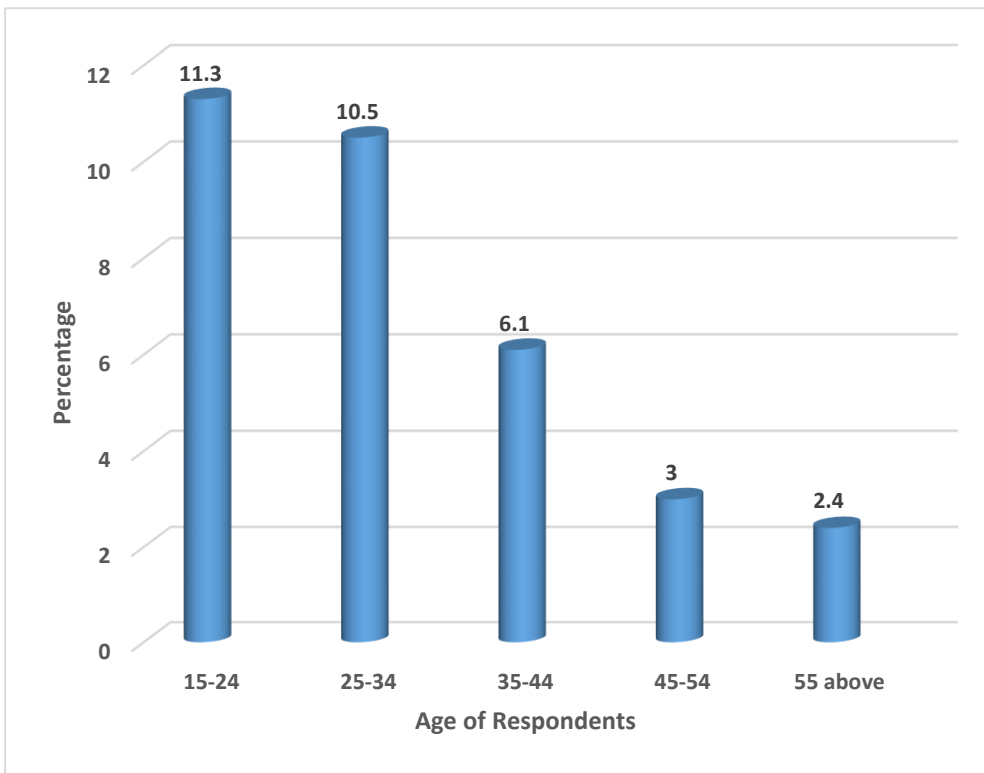


Figure 4 shows the association between MCP and age. The figure shows that the proportion of respondents who practiced MCP declined with age from 11.3% and 10.5 % among the respondents between 15-34 years to 6.1%,3% and 2.4% among respondents of age groups 35-44, 45-54 and 55 and above respectively ($X^2= 106.72$, $df= 8$, $p= 0.000$).

The proportion of respondents practicing MCP is highest among respondents with higher level of education (10%) followed by those with secondary education (8.6%) and is lowest among respondents with primary education (4.4%) and non-formal education (3.3%) ($X^2=51.88$, $df= 6$, $p= 0.000$). MCP was slightly higher (8.8%) among people staying in urban villages than among those staying in urban areas (8.1%) and rural areas with (6.8%) ($X^2=12.52$, $df= 4$, $p= 0.000$).

Slightly above one tenth (11.1%) of the respondents who were never married had multiple concurrent partners, followed by those who were cohabiting (6.9%) and those who were once married (4.6%) ($X^2=55.35$, $df= 4$, $p= 0.000$). MCP was common (10%) and (9.9%) among those

with no religion and those who belonged to other religions respectively, than among Christians (7.5%) ($X^2=10.97$, $df= 4$, $p= 0.000$).

4.4 Association between of Condom use and background Characteristics

Table 4: Percentage of respondents who reported condom use with their second partner by background characteristics

Variable	Condom Use	
	Number	Percentage
Sex		
Female	180	80
Male	416	79.2
$X^2=0.056$	df=1	p=0.813
Age		
15-24	189	82.5
25-34	273	80.1
35-44	96	74.4
45-54	29	78.4
55 and above	9	64.3
$X^2=5.411$	df=4	p=0.248
Education		
None/non-formal	15	53.6
Primary	62	75.6
Secondary	344	81.9
Tertiary	175	79.5
$X^2=13.785$	df=4	p=0.003
Residence		
Towns/Cities	265	80.8
Urban villages	176	84.6
Rural	155	72.4
$X^2=10.227$	df=3	p=0.003
Marital Status		
Never married	400	83.5
Living together	135	71.4
Once married	15	88.2
$X^2=13.190$	df=2	p=0.001
Religion		
Christianity	494	80.7
Other religions	29	63
No religion	71	80.7
$X^2=57.211$	df=4	p=0.000
Total	3519	
Overall Percentage		76.64

Table 4 results show the association between condom use with partner two and background variables. The results indicate that there is significant association between consistent condom use and background variables with partner two such as place of residence, education, marital status and religious affiliation. However, there was no significant association between consistent condom use and sex, and age. Slightly more females (80%) than males (79.2%) reported consistent condom use with their second partner. ($X^2=0.056$, $df=1$ $p=0.813$).

The percentage of respondents who consistently used condoms decreased with age, from 82.5%, 80.1% to 74.1% in ages 15-24, 25-34, and 35-44 years respectively. The percentage increased to 78.4% among respondents in the age group 45-54 years. This percentage declines to 64.3% among respondents in the age groups 55 and above. ($X^2= 5,411$ $df= 4$, $p= 0.248$).

Figure 5: Percentage of respondents who reported consistent condom use by level of education

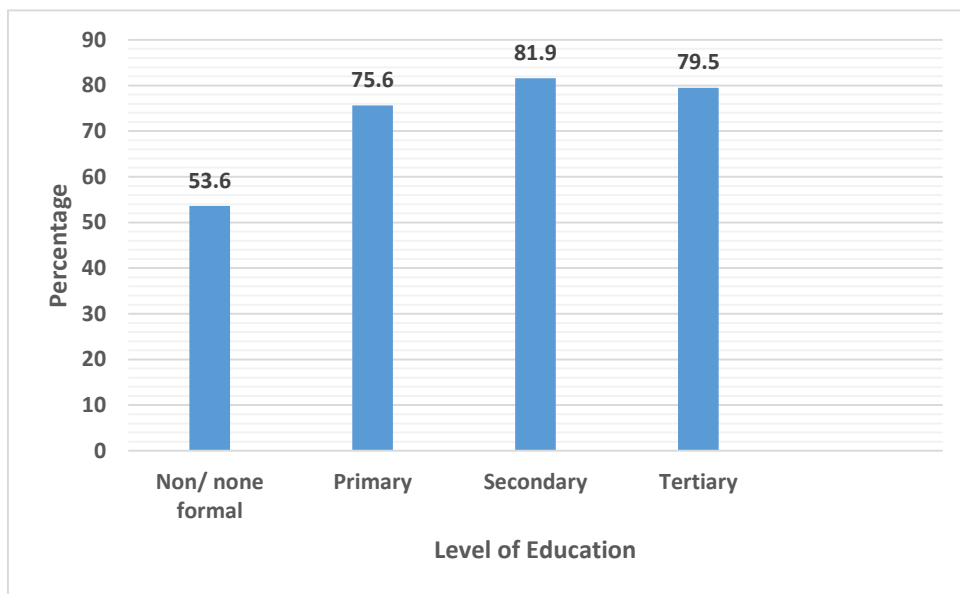


Figure 5 shows the association between consistent condom use by level of education and shows that consistent condom use increased with level of education. For instance, the proportion of respondents who used condoms consistently was highest among respondents with secondary education (81.9%) followed by respondents with tertiary education (79.5%); those with primary

education (75.6%) and those with none/non-formal education (53.6%) ($X^2=13.79$, $df= 3$, $p=0.003$).

Results indicate that consistent condom use was more prominent among respondents residing in urban villages (84.6%) than in urban areas (80.8%) and rural villages (72.4%), respectively ($X^2=10.23$, $df= 3$, $p= 0.06$). The proportion of respondents who use condoms consistently was highest amongst respondents who were once married (88.2%) than those who were never married (83.5%) and living together (71.4%) ($X=13.19$, $df=2$, $p= 0.001$). Christians and respondents with no religion (80.7%) reported having used condoms consistently with their second partner more than respondents of other religions (63%) ($X^2=57.21$, $df= 4$, $p= 0.000$).

4.5 Association between Types of Sexual Relationships and Condom Use

Table 5: Consistent Condom use by Types of Sexual Relationships

Variable	Condom Use			
	Yes Number	Percent	No Number	Percent
Types of Sexual Relationships				
Monogamy	2365	57.2	1772	42.8
Serial Monogamy	91	82	20	18
MCP	235	65.1	126	34.9
		$X^2=34.658$	$df=2$	$p=0.000$

Table 5 shows the association between consistent condom use and types of sexual relationship. The results show that, consistent condom use is significantly associated with types of relationships. A higher proportion of those in serial monogamous relationships (82%) used condoms consistently compared to those who had multiple concurrent partners (65.1%). Of these respondents who used condoms consistently 57.2% were in monogamous unions compared to those who had multiple concurrent partners (65.1%).

4.6 Logistic Regression Model Estimating the Likelihood of having Multiple Concurrent Partners

Table 6: Logistic Regression Model Estimating the Likelihood of having Multiple Concurrent Partners

Explanatory Variable	Exp (B)	Significance	95% C.I	
			Lower	Upper
Sex				
Male	1.00			
Female	3.468	0.000	2.676	4.495
Age				
15-24	1.00			
25-34	8.585	0.039	1.117	66.005
35-44	8.910	0.035	1.169	67.914
45-54	5.788	0.090	0.761	44.044
55 and above	3.180	0.279	0.391	25.851
Education				
None/non-formal	1.00			
Primary	0.373	0.014	0.169	0.822
Secondary	0.462	0.002	0.284	0.752
Tertiary	0.797	0.110	0.604	1.053
Residence				
Towns/Cities	1.00			
Urban villages	1.104	0.513	0.820	1.486
Rural	1.292	0.108	0.945	1.767
Marital Status				
Never married	1.00			
Living together	1.009	0.985	0.382	2.665
Once married	0.707	0.485	0.267	1.870
Religion				
Christianity	1.00			
Other religions	0.937	0.724	0.651	1.348
No religion	1.106	0.745	0.602	2.032

Table 6 shows the logistic regression odds ratios of the likelihood of having multiple concurrent partners. Factors that influenced the odds of having multiple concurrent partners were sex of respondents and level of education. However, there was no relationship between having multiple concurrent sexual relationships and age, marital status, religious affiliation and place of residence. The results show that females are 3.5 times more likely to have multiple concurrent partners than their male counterparts (Odds= 3.468, p= 0.000) Respondents who are aged between 25-34, 35-

44, were 8.6, 8.9, 5.8, and 3.2 times respectively more likely to have multiple concurrent partners compared to those aged 15-24 years.

Respondents with primary education were 2.7 times as likely to have had sex with two or more current sexual partners during the year leading to the survey compared to those with non-formal education (Odds=0.373, p=0.014). While those with secondary education and tertiary education were associated with a 54% and 20% decrease in the likelihood of having had multiple concurrent partners during the year leading to the survey, compared to those with non-formal education (Odds=0.462, p=0.002 and Odds=0.797, p=0.110).

The results show that respondents who resided in urban villages and rural areas were 1.1 and 1.3 times more likely to have two or more current partners compared to respondents who resided in urban areas (Odds= 1.104, p= 0.513 and Odds= 1.292, p= 0.108). Respondents in cohabiting unions (Odds= 1.009, p= 0.985) were more likely to have multiple concurrent sexual partnerships compared to those who were never married while those who were once married (Odds=0.707, p= 0.485) were as likely to have multiple concurrent sexual partnerships compared to those who were never married. Moreover, respondents who subscribed to other religions were 0.9 times as likely to have multiple concurrent sexual partnerships compared to Christians (Odds= 0.937, p= 0.724) while those who had no religion were 1.1 times (Odds=1.106, p=0.725) more likely to have to have multiple concurrent sexual partnerships compared to Christians.

4.7 Logistic Regression Model estimating the likelihood of having using condoms consistently

Table 7: The Odds Ratio from Logistic Regression Models Estimating the Likelihood of Having used a condom consistently in the past 12 months

Variable	Model 1 Exp (B)	Significance	Model 2 Exp (B)	Significance	Model 3 Exp(B)	Sign
Types of Sexual Relationships						
Monogamy	1.00					
Serial Monogamy	1.397	0.004	0.945	0.723	0.940	0.703
MCP	0.410	0.001	0.451	0.029	0.408	0.017
Sex						
Female			1.00		1.00	
Male			0.785	0.006	0.815	0.026
Age						
15-24			1.00			
25-34			0.287	0.000	0.251	0.000
35-44			0.395	0.000	0.356	0.000
45-54			0.415	0.000	0.377	0.000
55 above			0.289	0.000	0.247	0.000
Education						
None/None Formal			1.00			
Primary			1.903	0.000	1.678	0.006
Secondary			1.011	0.936	0.979	0.882
Tertiary			0.832	0.086	0.826	0.078
Residence						
Cities/towns			1.00			
Urban Villages			0.620	0.000	0.636	0.000
Rural			0.594	0.000	0.603	0.000
Marital Status						
Never married			1.00			
Living together			1.125	0.653	1.115	0.684
Once married			2.234	0.002	2.238	0.002
Religion						
Christianity			1.00			
Other religions			0.929	0.568	0.939	0.640
No religion			1.324	0.200	1.373	0.163
Have you ever tested for HIV?						
Yes					1.00	
No					1.062	0.680
HIV can be prevented by consistent condom use						
Yes					1.00	
No					0.962	0.863

Table 7 presents the odds ratios estimating the likelihood of having used condoms consistently in the past 12 months. The table includes 3 models. Model 1 estimates the likelihood of having used condoms consistently by types of sexual relationships. Model 2 estimates the likelihood of having used condoms consistently by types of sexual relationships and background variables while Model 3 estimates the likelihood of having used condoms consistently during the year leading to the survey by types of sexual relationships, background variables and sexual behaviour variables.

Model 1 indicates that individuals who were in serial monogamous relationships were 1.4 times more likely to use condoms consistently than those who were in monogamous relationships (Odds=1.397, $p=0.004$) while those had multiple concurrent partners were 2.4 as likely to report consistent condom use compared to those with monogamous relationships (Odds=0.410, $p=0.001$). However, after controlling for background variables in model 2 the odds of having had reported using condoms consistently of individuals who had serial monogamous relationships declined to (Odds=0.945, $p=0.723$). After further controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were in serial monogamous unions declined to (Odds=0.940, $p=0.703$). Furthermore, after controlling for background variables in model 2 the odds of having had reported using condoms consistently of individuals who had multiple concurrent partners' relationships increased to (Odds=0.451, $p=0.029$). However, after further controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who had multiple concurrent partners' relationships declined to (Odds=0.408, $p=0.017$).

Model 2 shows that the likelihood of using condoms consistently was only influenced by age, education, place of residence and marital status. However, the likelihood of having had used condoms consistently in the past 12 months was not influenced by, sex, religious affiliation, marital status and types of sexual relationships. Males were 1.3 times as likely to report consistent condom use, compared to females (Odds=0.785, $p=0.006$). However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were males increased to (Odds=0.815, $p=0.006$).

Furthermore, the results show that, respondents who were aged 25 to 34, 35 to 44, 45 to 54 and 55 years and above were 29%, 40%, 42% and 29% times respectively as likely to report consistent

condom use compared to those aged 15-24 years. However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were aged between 25-34, 35-44, 45-54 and 55 years and above declined to 25%, 36%, 37% and 25% and times respectively.

The results show that respondents who had attained primary education were 1.9 times more likely to use condoms consistently than those with non-formal education (Odds= 1.903, p= 0.000) while those with secondary education were 1 times more likely to report consistent condom use compared to those with non-formal education (Odds= 1.011, p=0.936). Having tertiary education was associated with a 17% decline (Odds=0.832, p=0.086) in the odds of having used condoms consistently during the year leading to the survey. However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who had attained primary, secondary and tertiary education decreased to (Odds= 1.678, p=0.006; Odds= 0.979, p=0.882; Odds=0.826, p= 0.078) respectively.

Respondents who resided in urban villages (Odds=0.620, p=0.000) and rural areas (Odds = 0.594, p= 0.000) were as likely to have used condoms consistently with their partners compared to those who reside in urban areas. After controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who resided in urban villages and rural areas increased to (Odds=0.636, p=0.000; Odds=0.603, p=0.000) respectively.

Conversely, individuals who were in cohabiting unions were 1.1 times more likely to report consistent condom use compared to those who were never married (Odds= 1.125, p= 0.653) while those with were once married were 2.2 times more likely to have used condoms with their partners compared to those who were never married (Odds= 2.234, p = 0.002). After controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were in cohabiting unions decreased to (Odds=1.115, p=0.684). However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who were once married increased to (Odds=2.238, p=0.002).

Respondents who belonged to other religions were 1.1 times as likely to have used condoms consistently with their sexual partners compared to Christians (Odds=0.929, p= 0.568), while those who had no religion were 1.3 times (Odds=1.324, p=0.200) more likely to have used condoms

consistently during the 12 months leading to the survey. However, after controlling for sexual behaviour variables the odds of having had reported using condoms consistently of individuals who belonged to other religions and those who had religion increased to (Odds=0.939, p=0.640; Odds=1.373, p= 0.163) respectively.

Model 3 shows that respondents who had ever tested for HIV/AIDS were 1.1 times more likely to have used condoms consistently with their partners than those who had not tested (Odd=1.062, p=0.680). Respondents who knew that HIV can be prevented by always using condoms correctly were 1 times more likely to use condoms consistently, compared to those who didn't know that HIV can be prevented by always using condoms correctly (Odds=0.962, p=0.863).

CHAPTER FIVE: DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Discussion

This section interprets and describes the significance of the findings in light of what is already known about the research problem being investigated, and to explain any new understanding or fresh insights about the problem taking findings into consideration. Furthermore, it highlights areas of concordance and discordance. This section shows whether the results prove or disprove the hypothesis of the study, the shortcomings of the study and the possible improvements that can be made in order to further develop concerns of this research. The hypothesis of this study indicated that MCP influences socio background characteristics, condom use and HIV testing. Moreover, there is an association between multiple sexual partnerships and socio background characteristics such as, sex, age, education level, marital status, and religious affiliation, place of residence, condom use, and HIV testing were all significant.

Overall, the results of this study indicate a significant association between types of relationships partnerships, socio background characteristics, and consistent condom use, such as education level, marital status, and religious affiliation, place of residence. However, there was no association between consistent condom use HIV testing, and the believe that correct condom use can prevent HIV transmission. Meanwhile, the association between condom use consistency and MCP diminished with the introduction of control variables. However, a positive association was observed between consistent condom use and background variables such as age, education, place of residence and marital status. Thus, individuals showed high propensity of consistent condom use.

The cross tabulation results show that men were more likely to engage in multiple concurrent partnerships than women. A comparison of other quantitative research on MCP in Botswana reveals that the results of this study are in concordance with other estimates of MCP. For example, Kalichman, (2007) & Gourvenec et al. (2007), found that a higher proportion of men practicing three of the four risk behaviours, for example, having more than one partner in the last 12 months and having any casual partners in the last 12 months, was 33%, compared to only 17% of women. In studies conducted in Sub-Saharan Africa it was shown that more than 20% of men who had ever had sex, had had multiple partners in the past 12 months, compared with less than 10% of young

women. Parker et.al (2010) found that one third of male and 12% of female participants in South Africa reportedly had more than one sexual partner in the past year. Whilst men are more likely than women to have multiple partners they are less likely to consider themselves at risk of HIV infection therefore might not see the need to use condoms during sexual intercourse (Do & Meekers 2009).

Men and women may be using concurrent and other multiple partnerships to proclaim power, gain status, and overcome economic barriers in gendered ways. For example, a study in Botswana found out that women often engage in multiple partnerships to obtain money and goods from men (Kroeger et al.,2005). Leclerc-Madlala, (2009) states that in concurrent sexual relationships men are driven by uncontrollable sexual urges and the cultural legacy of patriarchy and male promiscuity, while women are trapped by economic necessity and male domination. The social and economic complexity of multiple and concurrent partnerships in people's lives is probably part of the reason that prevention efforts in Botswana and other places historically have placed less emphasis on partner reduction and faithfulness (Carter, 2014).

Having multiple and concurrent partnerships increases the risk of transmission of sexually transmitted infections. Even if partnerships do not overlap, transmission potential exists when the gap between partnerships is shorter than the remaining infectious period (Mercer, et al. 2012). HIV can spread so efficiently through populations in which concurrent partnerships are common, everyone's risk is thereby increased, including persons who are commencing a sexual relationship, those who are monogamous with a partner who is not, or people who practice serial monogamy (Epstein & Morris, 2011). This explains why HIV does not infect those who engage in promiscuous behaviour, a person who remains faithful to his partner can contract HIV (Epstein & Morris, 2011).

Furthermore, extensive data across several countries which have established that engaging in sexual relationships with multiple partners increases the risk of acquiring and transmitting HIV, since each new partnership introduces a potential additional pathway for HIV transmission (Hudson, 1996). Concurrent partnerships increase the overall probability that uninfected partners will have sexual intercourse and be exposed to a partner during acute infection. This is because in

regular concurrent partnerships as opposed to casual partnerships, there would tend to be a higher number of total coital acts along with less consistent condom use (Halperin & Mah, 2008).

In contrast, during serial monogamy, given the time gaps between sexual relationships, few and possibly only one uninfected partner will typically be exposed to an infected partner during the acute infection stages (Halperin & Mah, 2008). If one partner in a relationship is serially monogamous, it is likely that he/she will not expose any individual during the acute infection period. These effects would result in a lower per-act risk of transmission and place fewer individuals at risk (Halperin & Mah, 2008). During serial monogamy previous partners are obviously not at risk for exposure, whereas during concurrent relationships partners who started a relationship earlier and continue to be sexually involved also continue to be at risk of infection (Halperin & Mah, 2008). Part of the reason for the high HIV prevalence in Botswana may lie in the occurrence of multiple sexual partnerships, whether serial or concurrent (Halperin & Epstein, 2004).

This study found that MCP declined as age advanced, particularly 35 years or above. The findings of this study is in agreement with other studies, for instance Chirwa & Chizimbi (2009), observed that younger people are more likely to engage in higher risky behaviour and older ages have been associated with an inclination toward longer-term, monogamous relationships. Similarly, Parker et al., (2010) found that one third of those 20–30 years of age with two partners or more in the past year were also found to have had two or more sexual partners in the past two months. This suggests that adolescents usually engage in short term sexual relationships, which subsequently make them more likely than their adult counterparts to have sex with multiple partners, thus placing them at a higher risk of contracting HIV/AIDS and other STIs (Chirwa & Chizimbi, 2009). This study also found that as age advanced serial monogamous relationships declined.

The observation from this study shows that one of the factors that influenced the odds of having multiple concurrent partners is level of education, as higher levels of education were attained, MCP and serial monogamy increased generally. This might suggest that people who are more empowered (e.g. urban residents, the more educated, high paying jobs to report a higher risk of multiple sexual partnerships. A similar tendency is observed among men and women who live in societies in which large numbers of men and women have high educational attainment (Mishra et

al., 2009). Mishra et al., (2009) states that in Uganda women with primary or higher education are significantly more likely to have concurrent partnerships. Among men, the strong monotonically increasing associations between concurrency and educational level and household wealth observed in the bivariate analysis become small and statistically insignificant Mishra et al., (2009). Furthermore, there has been development of a relatively affluent middle class with a desire among men for material goods and multiple sexual partnerships, and a sexual culture that associates transactional sex with gifts among women and multiple sex partners with social prestige among men (Leclerc-Madlala, 2009).

These results argue strongly for behaviour change and partner reduction efforts within local communities in which higher-risk behaviours such as multiple concurrent partnerships are accepted and institutionalized. These findings suggest that formal education especially at secondary or tertiary level did not have a positive influence on risky sexual behaviour. Furthermore, educational interventions like “*O icheke*” programme that were aimed to specifically raising awareness about HIV risks in relation to cross generational and transactional sex need to be evaluated as it did not lead to significant behaviour change and the reduction of sexual partners.

It is also interesting to note that people of Muslim or traditional/other religious affiliations are less likely to report multiple and concurrent partners than their Christian counterparts. This indicates that some Christians condone practises such as MCP and serial monogamy. It is believed that those with strong religious convictions from such Christian doctrines as “one man, one wife” would stay away from engaging in MCP. Although MCP is condemned among Christian married couples, their indulgence in such risky unacceptable sexual behaviour is not an exception (Chizimbi & Chimbi, 2009). Declines in HIV transmission have been associated with partner reduction among unmarried couples, reduction in extra-marital partnerships among married couples and use of condoms with non-regular partner (Exavery et al., 2015).

The results of this study indicates that respondents in cohabiting unions were more likely to have multiple concurrent sexual partnerships compared to those who were never married. Those who were once married showed a lower risk for MCP. It may be that currently unmarried people feel insecure without a wife or a husband, this makes them susceptible to MCP because before a woman or men finds their most preferred partner they will have multiple partners until they find a potential

partner. This observation is fairly similar to the prevalence of MCP among married people in Malawi (Chizimbi & Chirwa, 2009). In marriage, women likely become secure and settled, thus they are better able to avert risky sexual behaviours including MCP.

Furthermore, Chizimbi & Chirwa (2009) argues that the behaviour of a spouse in a marriage or a partner in a non-marital sexual relationship can make a difference between engaging in MCP and not. Male participants maintained that having a talkative wife or girlfriend, a bully, or a rude one would drive them out of the home or a relationship to look for a peaceful atmosphere where they can enjoy a chat, food, and sex (Chizimbi & Chirwa, 2009). On their part, the female participants maintained that having an abusive and a bully of a husband is a force that would drive them into engaging in MCP. This concurs with Nkambule et al. (2008), who reported sexual dissatisfaction by men and women as one of the key motive why people engage in MCP. Exavery et al. (2015), states that outside marital union, women have a very high-risk period to contract HIV infection, which could be due to MCP.

It was observed that was no significant difference in percentages between places of residence. People in rural and urban villages were more likely to have multiple and concurrent partners than rural men and women. Results of this study are similar with others from studies from sub-Saharan Africa conducted by Mshisha et al. 2008; Jana et al., Johnson et al., 2009 which show MCP is more common in urban areas than in rural and remote areas. The concurrent partners in urban areas are linked to consumption or materialism, whereas in rural areas they are linked to survival (Johnson et al., 2009). This suggest that the exchange of sex for social or financial gain is therefore common among rural and urban areas this often entices men and women to be involved in risky behaviour therefore increased risk for HIV transmission. Although there was no significant difference in percentages between place of residence rural areas, living in rural people are faced with more challenges than their urban counterparts, for instance people living in rural areas lack tertiary educational institutions , advanced medical care facilities, lack of modern infrastructure, low income earns, this might result in rural people not accessing information on programs like “*O icheke*” effectively leading to poor roll out of HIV related interventions in this areas.

The findings show that condom use is more likely with the second partner that with the first partner, this finding is consonant with findings from other studies which indicate that condom use is more

likely, with a new partner than with an established partner (Katz et al., 2004). Similarly, Catania et al. (1989), found that condom use is more likely with new partners or with partners characterized as side or secondary. Condom use changes as the dynamics of a relationship change with time. Within a new partnership, condom use may be a tacit acknowledgment of lack of familiarity with the new partner. If the sexual relationship endures over a period of a few weeks (For example, a new partner becomes an established partner), condom use may be reduced or stopped (Katz et al., 2004). Furthermore, condom use often declines in longer-term relationships where love and trust interact negatively with condom use. Power relations within relationships also negatively impact consistent or any condom use (Parker, 2011).

The results indicate that those had multiple concurrent partners were less likely to report consistent condom use compared to those with monogamous relationships. Similarly, Underwood et al., (2008) found that it is common for those involved in concurrent partnerships to have unprotected sex and that many only used condoms during the initial stages of the relationships. It may also be that relatively inconsistent condom use is because of lack of knowledge where condoms can be obtained or failure to consistently carry condoms. However, Letamo (2010) found that having multiple sexual partners increases the likelihood of condom use. Respondents who have had sex with more than one partner during the past year were more likely to use a condom than their counterparts. Females, who have had sex with more than one partner during the past year were more likely to use a condom than their counterparts. Males, those who have had sex with more than one partner during the past year are were also more likely to use a condom than their counterparts.

From the findings of this study, the researcher found that males were less likely to report consistent condom use, compared to females. Gendered power relations may influence primary prevention practices such as condom use, for instance males with higher relationship power are more likely to overpower women. Such power relations within relationships may also negatively influence risk exposure to HIV transmissions and may also have a negative impact on consistent condom use. The perpetration of intimate partner violence by men is believed to be a consequence of, and to sustain, inequitable gender power distribution that stems from ideologies of male superiority (Jewkes et al., (2009). Within violent relationships women's ability to use or suggest using condoms, and determine the timing and circumstances of sex is reduced (Jewkes et al., 2006).

Moreover, in sexual relationships characterised by the exchange of cash or other material goods, the 'paying partner' (most often men) gains sexual leverage and the right to guard and use his 'investment' in the manner he chooses, including unprotected sex and the use of violence (Dunkle et al., 2007). Additionally, men who perpetrate physical or sexual violence against their intimate female partners have been found to engage in higher rates of behaviours that increase their HIV risk such as having multiple sexual partners, inconsistent condom use, problem alcohol consumption, and engaging in transactional sex (Luke et al., 2008; Dunkle et al., 2007). This decrease in condom use, implies that consistent condom use is a challenge in multiple concurrent sexual partnerships, especially in established sexual relationships. This has profound implications on efforts by the government of Botswana to reduce the risks associated with concurrency and multiple partnerships.

The odds of using condoms consistently generally decline as age advances, the results show that consistent condom use is a key challenge in sexual partnerships, particularly among adults. Therefore, interventions focused on importance of consistent condom use for HIV prevention is needed and further investigations, is vital to understand contexts amplifying this observation. Such research would also reveal knowledge, attitudes, values, beliefs, and practices concerning sexual relationships and partnerships in the study area.

The results of this analysis show that condom use also declined as level of education increased. This shows that despite increased information and knowledge about AIDS, people continue to engage in risky sexual behaviour. Similarly, Stephens et al. (2012), found that among University of Botswana students, the use of testing services and condoms was low than might be predicted based on knowledge they have about HIV prevention measures. This suggest that increased knowledge about AIDS is not a factor that can predict behavioural change for HIV prevention such as consistent condom use. Correct and consistent use of condoms is one of the most reliable methods to prevent sexual transmission of HIV and has been, and continues to be the cornerstone of HIV prevention efforts globally (Hearst & Chen, 2004).

The effectiveness of condoms in preventing HIV transmission or acquisition has been estimated to be approximately 90% (Hearst & Chen, 2004). Despite the pervasive promotion of condoms, a review of condom promotion by Hearst & Chen (2004), concluded that there was no evidence,

anywhere in the world, to suggest that a generalized HIV epidemic has been reversed as a result of increased or consistent condom use, (Halperin & Mah, 2008). The authors of this review suggest a number of reasons why this may be so. First, while measures of condom use might provide some indication of use in general, they may not sufficiently assess use among high risk groups. Second, condoms may be used at last sex (as it is typically measured), but not consistently over time.

Condoms have not been popular everywhere in Africa. Green (1994), found out that, although AIDS awareness was reasonably high in Uganda in 1993, and although millions of condoms had been distributed, only about 3% of Ugandan men were regularly using condoms. Taylor (1990), similarly found that although the people of Rwanda were well informed about AIDS and had modified their sexual behaviour on the basis of their perceptions, none of the people in his study were using condoms (Dyk, 2008). Apart from social and political problem, there are deep rooted cultural beliefs against the use of condoms in some parts of Africa (Caldwell, 1994). Zazayokwe's (1989), research found out that some women in South Africa were afraid to use condoms because they believe condoms might remain behind during sexual intercourse. This misconception shows lack of knowledge and can be corrected by teaching the public about reproductive system as people won't be easily persuaded to use a condom.

The results show that individuals who were in cohabiting unions and were once married were associated with a decline in the odds of having always used condoms with their partners compared to those who were never married. This is mainly because consistent condom use often decreases in longer-term relationships where love and trust interact negatively with condom use. Consistent use of condoms was more likely to occur if the sexual partner was a casual acquaintance (Hloniphane, 2014). Some people do not use condoms because they believe that the use of a condom makes their partners think that they have HIV/AIDS or shows that they think their partner has HIV/AIDS. Some of the barriers to condom use include embarrassment when buying condoms, concern that condom use reduces sexual pleasure that care must be taken during sex to prevent condom breakage, and that quick withdrawal after sex is required or condom may come off (Ehrhardt, 1996).

Moreover, the results show that individuals who were residing in urban areas were less likely to consistently use condoms with their partners compared to those who resided in rural areas and

urban villages. The absence of alternative forms of leisure activity and the paucity of recreational facilities in urban areas leads to alcohol abuse and risky sexual behaviours. Shebeens and taverns in urban areas where men commonly met to socialize as places where extensive and diverse social networks, characterized by high rates of new sexual partner formation, concurrency and low condom use are common. Moreover, in contexts where multiple, concurrent partnering is sanctioned and promoted the use of condoms is still eschewed by many men (Townsend et al., 2010).

The HBM model emphasizes that people have to recognize and label one's behaviour as risky in prompting people to adopt a healthier behaviour. The greater the perceived risk, the greater the likelihood that people will engage in behaviour change to decrease the risk (FHI, 2004). Perceived self-efficacy to use condoms consistently or have a partner use a condom, and perceived social support for condom use are some of the key determinants of condom use. People who perceive themselves to be at risk of contracting HIV or STDs and the belief that condoms can effectively prevent HIV transmission is a predictor of consistent condom use are more likely to use condoms (Adih & Alexander, 1999).

Despite knowledge of consistent condom use as a way to prevent HIV transmission being high overall condom use has been low (CSO, 2009). Kegeles, et al., (1989), has found that low level of knowledge about the transmission and prevention of AIDS among adolescents was a predictor of non-use of condoms. Many other studies have shown that despite the increasing levels of AIDS knowledge, adolescents do not use condoms consistently. This suggests that programmes for HIV prevention has not yet yielded good results as the widespread implementation of HIV testing and counselling, testing for HIV does not lead to the adoption of prevention behaviours such as reducing multiple concurrent partners and consistent use of condoms.

5.2 Conclusion

According to findings of this study, results concludes that multiple and concurrent partnerships are prevalent and common in Botswana. Results. These results are in collaboration with other earlier studies in Southern Africa for instance in community with a generalized epidemic, it was found that the factors associated with concurrency amongst others were marital status, age at sexual debut, education level. The results showed that there is a significant relationship between multiple

sexual partnerships and socio background characteristics such as sex, age, education level, marital status, religious affiliation, place of residence, and consistent condom use. Sexually active youth of both sexes, are increasingly at high risk of contracting and transmitting sexually transmitted diseases, including HIV/AIDS, as they have multiple and concurrent partners and they have limited knowledge on condom use and safer sex methods. The study was conducted within the framework of the Health Belief Model which, explains people's willingness to adopt safe behaviour methods based on the perceived threat and labelling of behaviour as risky. Though Botswana are generally highly HIV literate, findings of this study concluded that a significant number of men are more likely than women to report risky behaviour like inconsistent condom use than women. This proposes knowledge about transmission of HIV has not led to low risk behaviour. The results of this study indicate that there is a tendency of literate people to ignore the perceived risk of engaging in multiple and concurrent partnerships and inconsistent condom use, this suggests that most people were convinced about the benefits of using condoms, reducing number of sexual partners but these perceived benefits were not associated with change in behaviour to decrease the risk associated with multiple and concurrent partnerships. It is difficult for people to change their risk behaviour, for example, decreasing sexual partners if they believe the new behaviour is not beneficial.

5.3 Recommendations

The government should scale up and strengthen the current interventions e.g. HIV education and information dissemination; service provision; life skills development through guidance and counselling by using multifaceted strategies e.g. mass media, workers' unions, churches, non-profit organisations to discourage and make multiple and concurrent partnerships practices unacceptable by individuals and the society.

There is an urgent need to review the "*O icheke*" programme to further address the dangers of MCP, inconsistent condom use, and its association with the dynamics of HIV transmission.

Government need to promote the use of male and female condoms to avoid reinfection of HIV by educating the public on the importance of using condoms. Education should be provided to the general public to address issues related to misconceptions use of condoms. Furthermore, government should come with strategies like group sessions, peer groups for women to discuss

issues that can promote the use of female condoms. Women can share their experiences, ideas, on the use of female condoms.

HIV prevention efforts should intensify the promotion of gender equality and address negative cultural norms and beliefs and encourage positive cultural practices to empower and reduce the vulnerability of women and girls as women are disproportionately affected by the HIV epidemic in Botswana.

The government should intensify health programmes in rural and remote areas particularly reproductive health in order to reduce the spread of HIV infection and should give high priority to information, education and communication campaign to raise awareness and emphasize behavioural change.

The findings also suggest the necessity of a highly coordinated year after year approach that focuses on empowering men and women through access to economic project and changing men 's behaviours and attitudes in order to lower the risk of HIV transmission.

There is need for further research in order to better understanding determinants and nature of sexual network in order to fully establish correlates of multiple and concurrent partnerships, as multiple and concurrent partnerships relationships have been shown to increase the risk of HIV infection by allowing the virus to spread rapidly to others even those who are in monogamous relationships.

5.4 Limitations

The use of secondary data used in this study is a limitation as the researcher was unable to clearly bring out the current data on levels and determinants of types of sexual relationships as it relied on 2011 population census. However, the sample size that was used was large, sufficient data has been gathered, important insights on types of sexual relationships were made. Since findings of this study are based on self-reported data about sexual behaviours and attitude, which are known to be likely to be associated with measurement bias due to social desirability, women tend to underreport and men tend to hugely inflate their premarital and extramarital sexual activity (Gregson et al., 2002).

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