DISCLOSURE OF HIV POSITIVE STATUS TO SEXUAL PARTNERS AMONG PREGNANT WOMEN IN A HEALTH DISTRICT OF BOTSWANA

by

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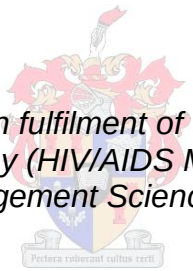

Assignment presented in fulfilment of the requirements for the degree of Master of Philosophy (HIV/AIDS Management) in the Faculty of Economic and Management Science at Stellenbosch University

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DECLARATION

By submitting this assignment electronically, I declare that the entirety of the workcontained therein is my own, original work, that I am the sole author thereof (save to theextent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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Dedication

I dedicate this project to my late father, Isidore Tshisuyi Kabeya who brought me up and left me with the spirit of hard work and human respect.

ABSTRACT

Disclosure of HIV status can be an important step as far as HIV prevention and subsequent treatment and care among discordant couples are concerned, also for the prevention of mother to child transmission, family or partner support, and treatment adherence. The purpose of this study was to determine factors affecting disclosure of HIV positive status among pregnant women to their sexual partners in a rural district of Botswana.

A cross sectional quantitative survey was employed. Structured interviews were conducted with 39 randomly selected HIV-positive respondents at seven sexual and reproductive health clinics in the district.

A significant association was found between the knowledge of HIV status of the partner and disclosure to that partner [X^2 (1) = 16.89; $p < 0.001$]. That is, respondents were less likely to disclose their HIV-status to their partner if they did not know the partner's HIV status compared to knowing that partner's status. Factors such as age, education status, employment status, income, religion, marital status were not found to be significantly associated with disclosure. Factors that respondents thought influenced people to reveal their HIV positive status to a partner were fear of blame (65.0%), casual relationships (52.0%) and fear of abuse (50.0%).

Based on the overall findings presented, it is concluded that no single factor as mentioned above could be necessarily said to influence disclosure of HIV status to a sexual partner, but rather possibly a combination of such factors.

Recommendations based on the findings in this study included the promotion of couples counselling to reduce the barriers to disclosure and increase the awareness of the partner's status; and the establishment of support groups in the community to address issues around the fear of stigmatization contributing to non-disclosure.

OPSOMMING

Die bekendmaking van MIV-status kan ’n belangrike stap wees ten opsigte van MIV-voorkoming en die verdere behandeling en sorg onder paartjies met verskillende status, ook vir die voorkoming van moeder-tot-kind-oordrag, ondersteuning van familie of lewensmaats en die nougesette gebruik van behandeling. Die doel van hierdie studie was om die faktore te bepaal wat die bekendmaking van MIV-positiewe status van swanger vroue aan hul seksmaats affekteer in ’n landelike distrik van Botswana.

’n Deursnee- kwantitatiewe opname is gebruik. Gestruktureerde onderhoude is met 39 ewekansig gekose MIV-positiewe respondente by sewe klinieke vir seksuele en voortplantingsgesondheid in die distrik gevoer.

Daar is ’n betekenisvolle verband gevind tussen die kennis van die MIV-status van die lewensmaat en die bekendmaking aan daardie maat [X^2 (1) = 16.89; $p < 0.001$]. Dit beteken dat respondente minder waarskynlik hul MIV-status aan hul maat bekend sou maak as hulle nie geweet het wat die maat se MIV-status was nie in vergelyking met as die maat se status wel aan hulle bekend was. Daar is bevind dat faktore soos ouderdom, opvoedingsvlak, werkstatus, inkomste, geloof en huwelikstaat nie beduidend met bekendmaking geassosieer is nie. Respondente het gedink dat faktore soos vrees vir verwyte (65.0%), oppervlakkige, toevallige verhoudings (52.0%) en vrees vir mishandeling (50.0%) mense beïnvloed het om hul MIV-positiewe status aan lewensmaats bekend te maak.

Op grond van die algemene bevindings wat aangebied is, word bevind dat geen enkele van die bogenoemde faktore noodwendig die bekendmaking van MIV-status aan ’n seksmaat sou beïnvloed nie, maar dat ’n kombinasie van sodanige faktore dit eerder moontlik kon doen.

Aanbevelings op grond van die bevindings van hierdie studie behels onder andere die bevordering van voorligting aan paartjies om die versperrings tot bekendmaking af te breek en bewustheid van die maat se status te verskerp, asook die vestiging van ondersteuningsgroepe in die gemeenskap om aandag te gee aan kwessies rondom die vrees vir stigmatisering, wat tot nie-bekendmaking bydra.

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ABBREVIATIONS

AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ARV	Antiretroviral
BAIS	Botswana AIDS Impact Survey
CDC	United States Centres for Disease Control and Prevention
DHMT	District Health Management Team
HCT	HIV counselling and testing
HIV	Human immunodeficiency virus
MCH	Maternal and child health
MOH	Ministry of Health
PLHA	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
RHT	Routine HIV test
SRH	Sexual and Reproductive Health
SSA	Sub-Saharan Africa
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	Voluntary counselling and testing
WHO	World Health Organization

CHAPTER 1: SCIENTIFIC FOUNDATION OF THE RESEARCH

1.1 RESEARCH BACKGROUND AND RATIONALE

The UNAIDS vision of a world with zero new HIV infections, zero discrimination, and zero AIDS related deaths needs effective preventive strategies, treatment, care and support (UNAIDS, 2011). Globally, despite the encouraging progress in stopping new HIV infections, the total number of new HIV infections remains high at about 2.5 million in 2011(UNAIDS, 2012). In SSA, where the majority of new HIV infections continue to occur, an estimated 1.8 million [1.6 million–2.0 million] people became infected in 2009 with about 60.0% of people living with HIV/AIDS (PLHA) being women (UNAIDS, 2010).

In SSA, large proportions of people living with HIV are in long-term relationships with partners e.g. in countries such as Kenya with 62.0% and Malawi with 78.0% (Anand et al 2009).According to Dunkle et al. (2008), 60.0% of new HIV infections through heterosexual transmission are within marriage or cohabitation in Zambian urban area, compared to 50.0%–65.0% new heterosexual infections in Swaziland (Mngadi et al 2009), 35.0%–62.0% in Lesotho (Khobotlo et al., 2009) and an estimated 44.0% of new heterosexual infections in Kenya (Gelmon et al., 2009). UNAIDS (2012) estimates that there are 4 million discordant couples (where one partner is living with HIV) among the estimated 34 million people living with HIV/AIDS in the world. In SSA, the numbers of discordant couples are increasing, consequently leading to an increase in HIV transmission where no protection is used (Cleland et al., 2004). Margaret (2008) found that the prevalence of discordant couples remains high, ranging between 36.0% and 85.0% in eastern and southern African countries.

The lack of disclosure of HIV status to a partner in discordant relationships (along with low condom use) put the uninfected partner at a high risk for HIV infection. Individuals who fail to disclose their HIV status are less likely to change sexual behaviour and practice safer sex than individuals who have disclosed (Pinkerton & Galletly, 2007). The consequences of non-disclosure, specifically to sexual partners, and unprotected sex increase HIV transmission (UNAIDS, 2010).Disclosing HIV test results to one's sexual

partner allows the partner to engage in preventive behaviours as well as the access of necessary support for coping with HIV status or illness. It may motivate partners to seek testing or change behaviour, and ultimately decrease the transmission of HIV (MOH, 2012).

Medley et al (2004), in a study on HIV sero-status disclosure among women in developing countries, found that 31.6% of pregnant women disclosed their status to their partners after eight months of their HIV diagnosis. Botswana is one of the countries with the highest HIV prevalence in SSA with an estimated HIV prevalence of 24.8% of adults 15 – 49 years of age (BAIS III, 2008; UNAIDS, 2010). The HIV prevalence rate in women is 20.4%, compared to 14.2% in men. Mmelesi et al.(2010) report that in Botswana, the proportion of HIV incidence is higher (54.95%) among women between 15-49 years in heterosexual relationships than among men of the same age (45.05%) in heterosexual relationships. The majority of discordant couples in Botswana are not aware of their own HIV status or that of their partners and as a result often do not practise safer sex such as using condoms consistently. These couples often go for HCT services individually but do not disclose their HIV status to their partners.

1.2 RESEARCH PROBLEM

Based on the arguments presented here, women are mostly affected by HIV-infection and being in a long-term discordant relationship increases the chances of such infection. This is a problem across the world and SSA as well as in Botswana. Disclosure can be an important step as far as HIV prevention and subsequent treatment and care among discordant couples are concerned, also for the prevention of mother to child transmission, family or partner support, and treatment adherence. However, there seems to be paucity in the literature on the reasons why there is a lack of disclosure to a sexual partner among discordant couples. Better understanding of the circumstances and events leading to disclosure to a sexual partner is required in order to better prepare such individuals for the possible consequences of disclosure, also in Botswana.

This research will therefore focus on further exploring issues related to disclosure in the Botswana context.

This study will specifically focus on exploring the views of HIV-positive pregnant women pertaining to disclosure issues in Kgatleng district, Botswana. Botswana has an average of 43,000 deliveries per year (MOH 2011a). Although Botswana has remained an international leader in the successful implementation of Prevention of Mother to Child Transmission (PMTCT) programme, there is an HIV prevalence rate of 31.8% among pregnant women, an average of 13,674 HIV infected women deliver every year (MOH, 2011a).According to the results of the Botswana 2011 ANC sentinel surveillance survey, 33.9% of pregnant women aged 15 to 49 years old are HIV positive in Kgatleng district (MOH, 2011b).Challenges facing HIV-infected women in Botswana include childcare demands, stigma issues, domestic violence, social ostracism and the topic of research in this assignment – a lack of disclosure of HIV-status (MOH, 2012).

1.3 RESEARCH QUESTION

Which factors contribute to the pregnant women' disclosure of their HIV positive status to their sexual partners?

1.4 AIM OF THE RESEARCH

The aim of this study is to identify possible factors contributing to the disclosure of the HIV positive status of pregnant women to their sexual partners.

1.5 RESEARCH OBJECTIVES

1. To identify possible personal and social factors leading to disclosure of HIV positive status, to their sexual partners, among women attending sexual and reproductive health (SRH) programme.
2. To identify possible personal and social factors leading to non-disclosure of HIV positive status, to their sexual partners, among women attending SRH programme.
3. To recommend interventions so to possibly improve HIV status disclosure among sexual partners.

1.6 SIGNIFICANCE OF THE RESEARCH

This study could shed more light on the factors influencing a pregnant woman's decision to disclose her HIV positive status to her sexual partner. This information may assist health care professionals and other stakeholders in understanding the complex elements of disclosure. Disclosure is an important prevention goal emphasised by the Botswana Ministry of Health in the protocol for HIV testing and counselling (MOH 2012).

Identifying factors which influence the decision to disclose could lead to an enhanced understanding by health care professionals and thereby utilising this information to improve disclosure rates.

1.7 RESEARCH METHODOLOGY

1.7.1 Research design

A cross-sectional quantitative survey using a structured interview schedule, based on literature reviews, with closed and limited open ended questions, was used to collect the data.

1.7.2 Research population and sampling

The study population consists of pregnant HIV positive women attending antenatal clinics in the chosen health district during the period of the study. The HIV positive status of women was determined based on the rapid HIV antibody testing provided at the sexual and reproductive health (SRH) clinic or any other clinical record. A total of 39 eligible study respondents, attending 7 (seven) randomly selected antenatal clinics, was sampled using convenient sampling and was interviewed by a trained research assistant who was fluent in both English and Setswana. Eligible respondents will be sampled from each of the 7 (seven) randomly selected SRH clinics.

1.7.3 Data collection instrument

A closed- ended structured interview schedule, with limited number of open-ended questions was used to determine the factors which influence the decision to disclose one's HIV positive status to the sexual partner. This interview schedule has been developed, based on literature review, for the purpose of this study.

1.7.4 Reliability and Validity of the research

The data collection instrument was distributed to 5 (five) experts in disclosure issues to verify the content, face, criterion and construct validity (Babbie & Mouton 2001, De Vos, Strydom, Fourie and Delport 2009). A statistician was consulted to assess the statistical feasibility of the data collection instrument.

1.7.5 Data collection

A structured interview schedule with closed-ended items and limited number of open-ended response options has been developed specifically for this study. A research assistant, trained by the researcher, who was fluent in both English and Setswana,

conducted individual structured interviews with the respondents. The research assistant was the lay counsellor, who is involved in daily HIV testing and counselling of general patients and pregnant women at the facility, and identified and interviewed the potential participants in the counselling room. The structured interview schedule was available in both English and Setswana.

1.7.6 Data Analysis

Data was edited, cleaned, coded, entered and analysed using SPSS version 13 with the assistance of a statistician, descriptive statistics was used for data analysis. The results are presented using tables and graphs.

1.8 ETHICAL CONSIDERATIONS

1.8.1 Protecting the rights of respondents

The research assistant explained the nature of the study, benefits and risks, the purpose, the interview procedure, and the expected duration, to each potential respondent. Participation in the study was voluntary and refusal to participate in the study had no effect whatsoever. In case any unforeseen event occurred, the respondent was given appropriate treatment and assistance at the healthcare institution. A psychologist was involved in case of any emotional disturbances. Respondents were assured that all information gathered was treated confidentially and anonymity was maintained. No unauthorised person had access to the completed structured interview schedules which was kept locked up by the researcher. Each respondent was assigned a code number for data processing purposes only.

1.8.2 Protecting the rights of the participating institution

Approval was sought from Botswana's Ministry of Health's Research and Ethics Committee, as well as from the District Health Management Team where the study was conducted. This was done subsequent to obtaining ethical clearance from the Research and Ethics Committee of the Department of economics and management sciences at Stellenbosch University.

Feedback will be provided to all stakeholders. Copies of reports will be given to the Ministry of Health, the participating health district and respondents who might request such reports. This opportunity was offered to every respondent.

1.9 CHAPTERS OUTLINE

Chapter 1: Scientific foundation of the study

Chapter 1 will describe the rationale and background of the study. It will also provide an overview of the literature, research question and objectives, methodology and the definitions applied in the study.

Chapter 2: Literature review

Chapter 2 will discuss the literature review regarding disclosure of a HIV positive status.

Chapter 3: Research methodology

Chapter 3 will describes the research methodology applied in the study.

Chapter 4: Reporting, analysis and discussion of results

Chapter 4 will deals reporting, analysis and discussion of the study results.

Chapter 5: Conclusions and recommendations

Chapter 5 will summarise the findings and recommendations based on the study results.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The research topic and related aspects are studied in depth and discussed in the literature review chapter. The literature review will focus on some aspects of HIV positive status disclosure among pregnant women to their sexual partners. This chapter discusses the meaning of disclosure, the context of disclosure and the factors influencing disclosure. Some of the factors that impact on disclosure will be identified from previous studies, and discussed.

2.2 DISCLOSURE

The act of informing another person such as a sexual partner, friend or family member, of one's HIV status is called disclosure. This act of disclosure can be done by the person him/herself or by another person such as a service or health provider (OACHA, 2003).

There are many contexts in which disclosure can take place, such as: disclosure within close or personal relationships (to close family members, sexual partners or spouses and friends); disclosure to service or health care providers (doctors, nurses, dentists, social workers, counsellors and insurance); disclosure at the workplace (to an employer, among employees, clients); disclosure in other institutional settings like prisons and schools; and disclosure to the public through the media (OACHA, 2003).

While there are many contexts in which disclosure occurs and more relevant and useful information concerning HIV status disclosure; this chapter focuses on self-disclosure to sexual partner, due to the significance and potential for HIV transmission to take place in such settings and the social, legal and ethical obligations to disclose one's status under different circumstances.

2.2.1 The Context of Disclosure

Depending on the context and the circumstances, disclosure of one's HIV status may be easier or more difficult. Due to fear of rejection, many people may have difficulties to disclose their HIV positive status to their potential sexual partners than to closer friends or family members. Some reports have suggested that disclosure to casual sexual partners may be more difficult due to the conditions in which these casual sexual relationships takes place, which often do not give time for conversation to know each other better. Under such conditions, individuals often tend to assume on non-verbal disclosure signals, which may not be reliable (OACHA, 2009).

A Disclosure as an Intimate process

Disclosure is a personal and intimate process which engages the soul, the mind and the body, and might affect self-image, self-efficacy, self-perception and confidence; therefore making the PLHA to be more vulnerable (OACHA, 2009).

B Disclosure as a difficult process

Disclosure of one's HIV-positive status can be extremely difficult depending on the context, environment and circumstances in which the person finds him/her-self. Counsellors and health service providers need to be aware and careful about all the psychosocial factors that may affect a person's disclosure or non-disclosure of HIV positive status decision to another person other than a health care provider (OACHA, 2009).

C HIV/AIDS and human rights

Although more efforts are made in this area by human right activists and organisations, human rights abuses such as discrimination, humiliation, fear, marginalisation,

exclusion, rejection and stigma associated with HIV/AIDS are still being experienced by PLHAs in many societies. Discrimination against PLHA's affects negatively the public health efforts. A study finding recently reported by Physicians for Human Rights (PHR) makes a link between widespread discriminatory views against women in Botswana and Swaziland and sexual risk-taking behaviours and, also, the very high HIV/AIDS prevalence rates. In Botswana, 30.0% of people thought that if they tested HIV positive and then disclose to their partner, this will lead to the end of their relationship. Lack of recognition of human rights not only causes unnecessary personal suffering and loss of dignity for those living with HIV/AIDS but it contributes directly to non-disclosure of one's HIV positive status (BONELA, 2008).

2.3 FACTORS INFLUENCING HIV POSITIVE STATUS DISCLOSURE

Numerous factors have been associated with status disclosure. They range from demographic factors, socio- economic to cultural and religious factors.

2.3.1 Age

Studies have demonstrated that younger age is associated with disclosure of HIV status to the sexual partners. Farquhar et al. (2000), conducted a cross-sectional study in Kenya, Nairobi; where they looked at 104 HIV positive pregnant women tested during antenatal care. They found that 65.0% of women disclosed their status to their partners and disclosure was associated with age. Women aged less than 24 years old were more likely to disclose their status to their sexual partners.

In a another study of PLHAs in USA, O'Brien et al. (2003) discovered that younger participants disclosed their HIV status to either the sexual partners or a close family member, compared to older participants who tended to disclose their status to a friend. According to Gaillard et al. (2000), in a cross sectional study of 331 HIV positive pregnant women enrolled in antenatal trial in Mombasa, Kenya; women aged less than 22 years had higher disclosure rate compared to their older counterparts.

Contrarily to the above studies, Kadowa and Nuwaha (2009), in a case control study conducted in Uganda among PLHAs, showed that participants aged less than 31 years never disclosed their HIV status and the mean age of disclosure was 38 years.

2.3.2 Gender

HIV/AIDS disproportionately affects marginalized populations such as women as demonstrated by BIAS IV (2013) results in which females in Botswana have a relatively high prevalence rate of 19.2% compared to 14.1% of males. And these women may be ill-treated if they disclose their HIV status to their male sexual partners due to gender imbalances and discrimination in many communities (Türmen, 2003).

Violence against women is a global epidemic that encourages high rates of HIV infection among women. Women face a higher risk of HIV infection through forced sex than consensual sex. Violence and the fear of violence against women can discourage them from seeking HIV testing services, negotiating on safe sex practices, or disclosing their HIV status to their sexual partners (BONELA, 2008; BONELA, 2009; Deribe et al., 2007; Medley et al., 2004).

In a study conducted in South Africa among PLHAs, males were found to disclose their result more often to their partner than their female counterparts (Skogmar et al., 2006). In contrast, another South African study on self-disclosure in recently diagnosed HIV positive revealed that being a male was associated with non-disclosure of HIV status (Olley, Seedat & Stein 2004).

According to Deribe et al. (2007), the prevalence of HIV/AIDS is disproportionately high among groups that already suffer from a lack of human rights protection, social and economic discrimination, or marginalization in terms of legal status. Women are more likely than men to experience negative consequences, such as violence, when they disclose their HIV status. In a cross-sectional observational study of HIV/AIDS patients admitted to the school of tropical medicine hospital in Kolkata, India, 16.6 % of women reported negative outcomes following disclosure of their HIV positive status, compared

to 11.5 % of men. The main reasons for nondisclosure among PLHAs in Southern India were relatively good health and emotional status, denial of diagnosis, fear of rejection, limited knowledge of and belief in strategies to live positively with HIV, unacceptability of condoms and safer sex, and women's economic dependency and lack of power in sexual situations (Pranita, Dasgupta & Saha 2007).

A study by Medley et al (2004) on barriers of HIV disclosure among women in developing countries, found that women particularly feared accusations of infidelity, abandonment, discrimination and violence, and that between 3.5% and 14.6% of women reported experiencing a violent reaction from a partner following disclosure.

Meursing & Sibindi (1995) found that in Zimbabwe, wives' informing their husbands about their HIV status was found to be a major problem for most PLHAs.

2.3.3 Type and Duration of relationship

Research on issues around sexual partnerships has demonstrated that stable partnerships are more likely to involve in disclosure than unstable partnerships (Deribe et al., 2007; Niccolai, King, D'entremont & Pritchett, 2006). In a study conducted among HIV infected pregnant women in Tanzania, a short duration of relationship, polygamous marriage, working out of home, not knowing someone with HIV and lower income were negatively associated with disclosure. In the same study it was found that women who had more than six lifetime sexual partners were less likely to disclose their status (Antelman et al., 2001).

According to Gari, Habte and Markos (2010), in their study of women attending ART clinic at Hawassa University Referral Hospital in Ethiopia, married women tend to disclose their HIV status to their partners than unmarried or cohabiting women. Disclosure to sex partners is more likely in longer-term, romantic relationships than in casual relationships such as one-night stands or anonymous partners. Disclosure also varies depending on perceived HIV status of partners, level of HIV risk of sex activities,

sense of responsibility to protect partners such as personal vis-a-vis shared responsibility and alcohol or drug use (Duru et al., 2006).

2.3.4 Illness severity

According to Chimwaza and Watkins (2004), in many clinics where HIV testing is available in African countries, some individuals only come for a test after they are already gravely ill. It was found that the home caregiver for the individual, generally a family member and more often than not a woman or girl, is often not informed of the person's real diagnosis while in a hospital or at a clinic testing site because of the stigma attached.

Specifically, illness severity can influence the disclosure of one's HIV status to the partner, family member or friends. In a cross-sectional study carried out at Jimma University specialized hospital in Ethiopia among PLHAs, it was found that clinical stage of disease is associated with HIV status disclosure. Many PLHAs delay disclosure until their disease has progressed to an advanced stage. Individuals in an early WHO clinical state (Stage I&II) of disease were 78.0 % less likely to disclose to a partner compared to those in an advanced (Stages III& IV) state of disease (Deribe et al 2008). Other studies on prevalence and correlates of HIV disclosure have found an association between disclosure and the experience of symptoms of AIDS (O'Brien et al 2003).

2.3.5 Time between HIV diagnosis and disclosure

A challenging issue for many people is the timing of disclosure. If it's not done relatively early, it can become more difficult as time goes on, and can cause significant disruption to an ongoing relationship if the disclosed-to partner feels betrayed due to the lack of an earlier disclosure. HIV positive persons who have thought through a disclosure plan and have a consistent strategy for managing disclosure are less likely to engage in risky sexual behaviours than those who do not disclose or have inconsistent disclosure strategies (Parsons et al., 2005).

In a study among PLHAs conducted in the USA, it was found that initially after an HIV diagnosis, most of the men were reluctant and fearful of disclosing their HIV-positive status to others. They used this period as an opportunity to come to terms with their diagnosis before having to contend with the reactions of others. After this phase, there was evidence that disclosure was increasingly used as a mechanism for coping with the disease. Disclosure was used to increase both practical and emotional support, share responsibility for sex and to facilitate self-acceptance (Holt et al., 1998).

In a risk and prevention survey of 2,864 HIV patients in the USA, the length of time since HIV diagnosis has been shown to be positively correlated to disclosure. Most PLHAs disclose their status to some, but not all, of their partners, friends and family. Disclosure generally becomes easier the longer someone has been living with HIV, as he/she becomes more comfortable with an HIV positive status (Duru et al., 2006).

In a study by Deribe et al. (2008), disclosure was made as early as one day and late as two years after learning about HIV status. Most of the participants (73.0%) disclosed on the day of receiving test result, 74 (12%) within two weeks, 55 (9%) in 2 to 4 weeks, 27 (4%) in 1 to 4 months and 12 (2%) greater than 4 months.

According to Antelman et al. (2001), in a study of 1078 HIV- positive pregnant women, in Tanzania, 22.0% women disclosed their HIV status to their partners within two months of their HIV diagnosis, whereas 40.0% disclosed after 46 months.

In a cross-sectional study done in Dar es Salaam, Tanzania, where 245 women were tested during voluntary HIV testing and counselling clinic, 69.0% of HIV positive and 83.0% of HIV negative women disclosed to their sexual partner 3 months after HIV testing (Maman et al., 2003).

Crepaz and Marks (2003) in their study about disclosure, sexual communication and safe sexual practice among HIV infected men, discovered that the ability to disclose one's HIV-positive status can be related to the degree to which an individual has accepted his or her HIV diagnosis. It was less likely to disclose recently after diagnosis, when a person is grappling with the initial impact of his or her HIV positive status. The length of time since testing HIV-positive also was found to have an impact

on disclosure decisions. According to the respondents in this study, it was found that when they had been living knowledgeably with a disease for a long time, it became easier for them to come to terms with the disease.

2.3.6 Knowledge of the HIV status of the partner

PLHAs are more likely to disclose to a partner whom they know is HIV-positive than to an HIV-negative or unknown HIV status partner (Medley et al., 2004).

Public health messages have traditionally urged disclosure to all sexual and drug using partners. In reality, some PLHAs may choose not to disclose due to fears of rejection or harm, feelings of shame, desires to maintain secrecy, feelings that with safer sex there is no need for disclosure, fatalism, perceived community norms against disclosure, and beliefs that individuals are responsible for protecting themselves (Wolitski et al., 2004).

However, both partners should be responsible for knowing their own status, disclosing their own status when it seems important, and asking their partner about their status if they want to know (Galletly & Pinkerton, 2006).

2.3.7 Socio-economic status

The most common barriers to disclosure mentioned by participants in eastern and southern African countries like Botswana, South Africa, Tanzania and Ethiopia include fear of abandonment, rejection and discrimination, violence, upsetting family members, and accusations of infidelity. Women's fear of abandonment is closely tied to fear of loss of economic support from a partner. In these settings where financial resources are unevenly distributed between man and women and women totally depend financially on their partner, it is not surprising that fear of losing this instrumental support from a partner is a major consideration when deciding whether to share HIV test results or not (Medley et al., 2004; Deribe et al., 2008; Antelman et al., 2001; BONELA, 2008; BONELA, 2009).

Farquhar et al. (2000) in a study at the ANC setting in Kenya found that women of lower socioeconomic status had a higher disclosure rate than women of higher socioeconomic status. In a study conducted in Tanzania among HIV positive women, lower income was negatively associated with disclosure (Antelman et al 2001). Individuals with high social support tend to disclose their result more often than those without such support (Medley et al 2004; Deribe et al 2008).

2.3.8 Self-efficacy

Self-efficacy has been reported as one of the determinants of HIV status disclosure. Having not disclosed to sex partners was closely associated with lower self-efficacy for disclosing, with women who had not disclosed reporting the lowest disclosure self-efficacy. In a study conducted in a voluntary counselling and testing clinic in Dar es salam, Tanzania a very strong association was found between prior communication about HIV testing with a partner and HIV status disclosure (Maman, Mbwambo, Hogan, Weiss, Kilonzo & Sweat,2003). A similar finding was obtained from an Ethiopian study of HIV positive women (Kassaye, Lingerh & Dejene, 2005).

Disclosure can provide psychological benefits as reported in a study of HIV positive injection drug users who disclosed their status, further experienced increased intimacy with partners and reaffirmation of their sense of self. Many PLHA persons who disclose their status find that it reduces anxiety about transmission, so sex can be much more comfortable and relaxed (Parsons et al., 2004).

2.3.9 Education status

In a study conducted among HIV positive women in Burkinafaso, Issiaka et al. (2001) found that educated women shared results with their partners more often than illiterate women. According to Deribe et al., (2008), in a study among PLHAs in Ethiopia, participants with higher education level were more likely to disclose their HIV status compared to those with lower education level or illiteracy level.

However, other studies on HIV positive women in Ethiopia and Uganda have reported that there is no significant association between disclosure and level of education (Gari et al., 2010; Kadowa & Nuwaha, 2009).

2.3.10 Religion and culture

According to Zou et al. (2008), in a study of Tanzanian Christians, there is a strong belief that PLHA have not followed God's word or they are sinners and HIV is a punishment from God. Results in this study indicated that these religious beliefs were significantly associated with shame related HIV stigma. Of the 438 participants attending Catholic, Lutheran and Pentecostal churches in both urban and rural areas, 84.2%felt that they will disclose their HIV positive status to the pastor or congregation, 93.7% said that they will prefer ART if they were HIV positive and 80.8% believed in prayers being able to cure a PLHA.

Kalichmana and Simbayab (2004) in their study on the South African traditional and religious beliefs about HIV/AIDS found that PLHAs are often considered by society to have contracted HIV due to their careless sexual behaviours and this has a negative effect on disclosure. In north-west Nigeria the results of a study among PLHAs showed that Muslims are stigmatized more often if their partners die from AIDS. Cultural beliefs often prevent Muslims, especially women, from attending HIV/AIDS clinics and disclosing their status (Akpa et al., 2011).

In some African cultures multiple sexual partners are acceptable for men in combination with alcohol or drug abuse, which, in turn lead to increase high risk sexual behaviour (Türmen, 2003). Similarly, Eustace & Illagan (2010) found that individuals are less likely to disclose their HIV status if they have multiple sexual partners and more likely to engage in unprotected sex.

2.3.11 HIV and stigmatization

Cameron (2005) qualifies stigma as a mark of "*disgrace, discrimination, hatred, hardship, abandonment, isolation exclusion, prohibition, persecution, poverty, privation*". A stigma may be internal or external, real, or perceived. An example of real and external stigmatisation is when a person whose HIV positive status is known by other people, he/she may be blamed, victimised, isolated or rejected, or become a subject for gossip in the community. Despite educational efforts, one of the major contributing factors to self or internal stigmatisation is the fear of the unknown by the PLHAs themselves; since HIV/AIDS is considered as a death sentence and it is contracted by sexually indiscipline people (Knapp van Bogaert & Ogubanjo, 2011). According to Medley et al (2004), stigma is perceived when people believe, or have the false impression, that society is stigmatising them for one reason or another, when in fact, it is not. In this context, this would pertain to the perception of PLHAs who are being stigmatised.

While more efforts have been increased over the last decades to reduce the stigma against PLHA's, the results of a survey conducted in nine countries, including Brazil, China, France, India, Mexico, Russia, South Africa, UK and USA, found that nearly 50.5% of the surveyed people said that they were not comfortable associating with HIV-infected persons (Brown, 2007).The fact that HIV infection is often associated with particular sexual and drug-related activities, stigmatization of PLHAs is common. Disclosure can expose PLHAs directly or indirectly to discrimination or rejection by family, friends and community (BONELA, 2008; BONELA, 2009; Knapp van Bogaert & Ogubanjo, 2011).

Studies have shown that stigma can deter or delay disclosure. Kalichmana and Simbayab (2004) found that in South Africa, the fear of stigmatisation was a major justification for non-disclosure of HIV-positive status, which, in turn, impeded control of the pandemic. In Nigeria, Akpa et al., (2010) noted that stigma is identified as an important factor as far as HIV/AIDS pandemic is concern which impacts on the rapid transmission of the disease and also it is the main reason for non-disclosure.

According to Mmelesi et al. (2010), HIV and AIDS are still stigmatizing conditions often leading to discrimination and the denial of HIV-positive individuals to their right to health care services. Stigma hinders many aspects of prevention programs: Testing, disclosure, care and support for PLWHA are all advocated but impeded by fear of stigmatization.

2.4 DISCLOSURE IN THE BOTSWANA CONTEXT

In Botswana, HIV prevalence among married couples is higher in males with 26.3% compared to their female counterparts at 18.7%. In those who were never married, the prevalence is high amongst the females at 20.6% compared to 12.8% for their male counterparts. But the prevalence rates were evenly matched for both sexes among those who were cohabiting or living together at 34.0% (BAIS IV 2013).

According to BIAS (2013), the prevalence of HIV in Botswana rises from 11.6% in those with pre-primary education to 20.6% in those with non-formal education; and it goes as high as 22.2% amongst those with secondary education. The HIV prevalence then declines as people get more educated to as low as zero percent amongst people with PhDs.

Based on the Botswana Ministry of health PMTCT guidelines (2009), all patients or clients, regardless of their HIV status, should be empowered and encouraged to inform their sexual partners about their HIV test results. For HIV positive clients who are reluctant or fearful to disclose their results, the service provider should offer additional, ongoing counselling to help the client inform the partner. The service provider may inform the client's sexual partner about the HIV test results in the presence of the client and only upon the client's request. Sexual networks can be uncovered through contact tracing and partner notification, resulting in more people obtaining knowledge of their HIV status and accessing HIV prevention, treatment, care and support services.

As far as vulnerability is concerned, the Republic of Botswana national policy on HIV and AIDS (2010) has established that some groups such as children, young people, women and sexual minorities are at greater risk of HIV infection. It notes that women

are particularly vulnerable to infection because of a complex mix of discrimination, economic deprivation, cultural and biological factors.

In Botswana, a survey of HIV patients receiving ART found that stigma often prevents disclosure of an HIV-positive status to partners, providers and family members, which in turn deter behaviours that can prevent further spread of HIV, such as safe sex, or mitigate its impact, such as health care seeking (Wolfe et al., 2006).

Mmelesi et al. (2010) observed that in Botswana, there is a high rate of discordant couples, and most of these discordant married or cohabiting couples are not aware of their HIV status or of their partner's. They go for VCT individually and do not disclose their HIV status to their spouses. Couples who test individually are more likely to disclose to persons other than their spouses. Furthermore, females may not disclose to their spouses for fear of blame and marital disruption. The proportion of persons aged 15-49 years who have tested within the last 12 months preceding this study and knows their HIV status was 41.2% while the proportion of VCT clients who access HCT as couples was only 8.0%.

2.5 SUMMARY

This chapter has provided some information and results in the available literature about disclosure of HIV status to other people and sexual partners in different settings and realities. Research has shown that disclosure can be an easy or difficult process depending on the context and environment; and many other factors. The rates of disclosure varies depending on different characteristics such as age, marital status and type of relationship, education level, economic status, cultural and religious beliefs, severity of illness and the HIV status of the partner.

This study will seek to establish how these factors affect disclosure of HIV status to sexual partner among pregnant women in a Botswana context.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the methodology that was used in this study and specifically looks at the study setting, study design, target and study populations, sampling techniques, research instruments, ethical considerations, data collection, data quality control, data management and analysis.

3.2 RESEARCH SETTING

The study was conducted in Kgatleng health district. Kgatleng is a district situated in the South Eastern part of Botswana with a population of about 92,247. According to the 2011 census, 92.0% of this population live within 8km of a health facility. It shares the border with Gaborone City Council in the South, Kweneng in the West, South East in the East and Central District Council in the North. The district has 28 health facilities: one district hospital, 14 clinics, 13Health Posts and 66 outreach clinics (CSO, 2011).

The data collection period was between November and December 2013. Seven Sexual and Reproductive Health (SRH) clinics located in Kgatleng Health district were selected as study sites.

The names of the selected facilities used as the study sites are:

- Artesia clinic
- Mmathubudukwane clinic
- Mochudi clinic I
- Phaphane clinic
- Makakatlela clinic
- Modipane clinic
- Oodi clinic

3.3 RESEARCH METHODOLOGY

3.3.1 Research design

A descriptive correlation design with a quantitative approach was followed.

3.3.2 Population and sampling

The target population, for the purpose of this study, was all the HIV infected pregnant women who attended a SRH clinic in Kgatleng health district.

The sample was selected from seven randomly selected clinics in Kgatleng health district. The convenience sampling method was applied in this study and according to Burns & Grove (2009); this method dictates that respondents are included in a study because they happened to be in the right place at the right time. The total number of respondents that were recruited for the study after signing the informed consent was thirty-nine (39).

3.4 DATA COLLECTION

3.4.1 Data collection instrument

The study was conducted by a research assistant, using an interview schedule with structured questions and a few open ended questions. The contents of the interview schedule included the following three sections:

- Section A: demographic data. This section covered the respondent's age, marital status, education level, monthly income, employment status and religion.
- Section B: Disclosure issues. Section B covered items like time of HIV diagnosis, disclosure of the HIV status to other people, the timing of the disclosure and to whom, and reasons for disclosure or non-disclosure.

- Section C: Social information. This section respondent's alcohol intake habits, sexual habits and duration of relationships, and knowledge of HIV status of the partner.

3.4.2 Validity and reliability of the research instrument

In this study, five healthcare providers, trained and knowledgeable about ART issues, were consulted and agreed that the instrument appeared to address ART adherence issues.

The reliability of a data collecting instrument refers to the accuracy or precision of an instrument (De Vos et al 2002). It is a matter of whether a specific method, if applied to the same object, would give the same results (Babbie & Mouton 2001).

3.4.3 Data collection procedures

Every morning the clinic nurse informed all eligible patients about the study and, if they were interested in participating, he/she referred them to the interviewer who conducted individual structured interviews, in Setswana or English, after being trained by the researcher. The interviews took place in a private office and no disturbances occurred during the interviews. The researcher checked the completed interview schedules at frequent intervals to identify and address any potential problems/shortcomings in the data collection process.

3.4.4 Data management

The completed interview schedules were kept locked up. These interview schedules contained no names and were handled in a very confidential manner to prevent use of consent forms as reference to trace and obtain the name of the respondent.

3.4.5 Data analysis

Descriptive statistics were used for analysing the sample's socio-demographic characteristics. Statistical analysis methods were used to measure associations using SPSS version 13. Associations between socio-demographic factors and HIV status disclosure were determined using Chi-squares of Fishers exact test. A statistician assisted with the analysis and interpretation of the data.

3.5 ETHICAL CONSIDERATIONS

Permission to carry out the study was granted by the Stellenbosch University research and ethical committee (see Annexure 3), the Botswana Ministry of Health (see Annexure 5) and the participating district health management team (see Annexure 7) with names deleted to guarantee anonymity.

3.5.1 Informed consent

Signed informed consent (see Annexure 1 and 2 for an informed consent form in English and Setswana) was obtained prior to conducting any structured interview. The signed, informed consent also guaranteed the confidentiality agreement on the side of the researcher. Participation in the study was voluntary and refusal to participate in the study had no effect whatsoever on any patient's treatment. No respondent was coerced to answer any specific question that he/she did not want to answer.

Each respondent was informed about the interview procedure, and its potential risks and benefits. No risks were anticipated as only interviews were conducted. However, if any respondent might get upset or experience any negative reaction during or as a result of the interview, the researcher was available to assist such a patient and to refer the patient to the relevant healthcare provider, if that should be deemed necessary. No remuneration was paid but patients might benefit in future if factors that promote or hinder ART adherence could be identified and addressed as a result of this study.

3.5.2 Anonymity

Prior to the interviews, all respondents were requested not to make any reference to colleagues or to their clinic numbers. Respondents were assured that all information gathered was treated carefully and anonymity was maintained by de-identifying the data and no names were used. Each respondent was assigned a code number for data processing purposes only

Every signed consent form was sealed in an envelope and placed into a sealed container. The completed interview schedules were placed into another sealed container. This ensured that no signed consent form could be linked to any specific completed interview schedule to maintain anonymity.

3.5.3 Confidentiality

The individual interviews were conducted privately in a specific room. It was ensured that the interviews were inaudible to all other persons. During this study all respondents were verbally reassured about the confidentiality of the information provided. The researcher requested respondents not to discuss the content of the interview with other patients. No unauthorised person could access the signed consent forms or the anonymously completed interview schedules which were kept securely locked up.

3.5.4 Feedback

Feedback would be provided to all stakeholders. Copies of the dissertation will be given to Botswana's Ministry of Health, the participating district and respondents who requested such reports, after the acceptance of the dissertation. This opportunity was offered to every interviewee. Any articles published, based on this study's findings, will also be supplied to the relevant authorities.

CHAPTER 4: REPORTING, ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

The data analysis, interpretation and discussion will be summarised in this chapter using tables and figures. The uni-variate analysis examined the characteristics of the participants and the social behaviours with HIV status disclosure. The results of bi-variate analyses are also presented in this chapter, exploring the predictors of disclosure such as age, marital status, education level, income, employment status and partner's HIV status.

4.2 RESEARCH RESULTS

4.2.1 Socio-demographic characteristics

Table 4.1: Socio-demographic characteristics of the respondents (N=39)

Variable	Frequency	Percentage
Age		
21 - 25	22	56.4
26 - 30	6	15.4
31 - 35	5	12.8
> 35	6	15.4
Total	39	100.0
Marital status		
Never Married	27	69.2
Married	4	10.3
Co-habiting	6	15.4
divorced or separated	2	5.1
Total	39	100.0

Education		
Primary	2	5.1
Secondary	28	71.8
Tertiary	9	23.1
Total	39	100.0
Employment		
Employed	11	28.2
Unemployed	26	66.7
Self-employed	2	5.1
Total	39	100.0
Income		
No Income	22	56.4
< 1000	5	12.8
1000 - 1999	8	20.5
>=2000	4	10.3
Total	39	100.0

Table 4.1 summarises the socio-demographic characteristics of the 39 respondents. The majority of the respondents (56.4%, n=22) were between the age of 21 and 25 years, 15.4% (n=6) were between 26 and 30 years, 12.8% (n=5) were between 31 and 35 years and 15.4% (n=6) of the respondents were above 35 years. Most of the respondents (69.2%, n=27) were never married, 10.3% (n=4) were married, 15.4% (n=6) were cohabiting and 5.1% (n=2) were either divorced or separated. The results also show that 71.8% (n=28) of the respondents had secondary education as their highest level of education, 23.1% (n=9) attained tertiary education and 5.1% (n=2) only had primary education. Concerning employment status of the respondents, 66.7% (n=26) were unemployed, 28.2% (n= 11) were employed and 5.1% (n=2) were self-

employed. More than half (56.4%, n=22) of the respondents had no income, 20.5% (n=8) earned between 1000 and 1999 pula, 12.8% (n=5) earned less than 1000 pula and 10.3% earned more than 2000 pula.

A. Religion of respondents

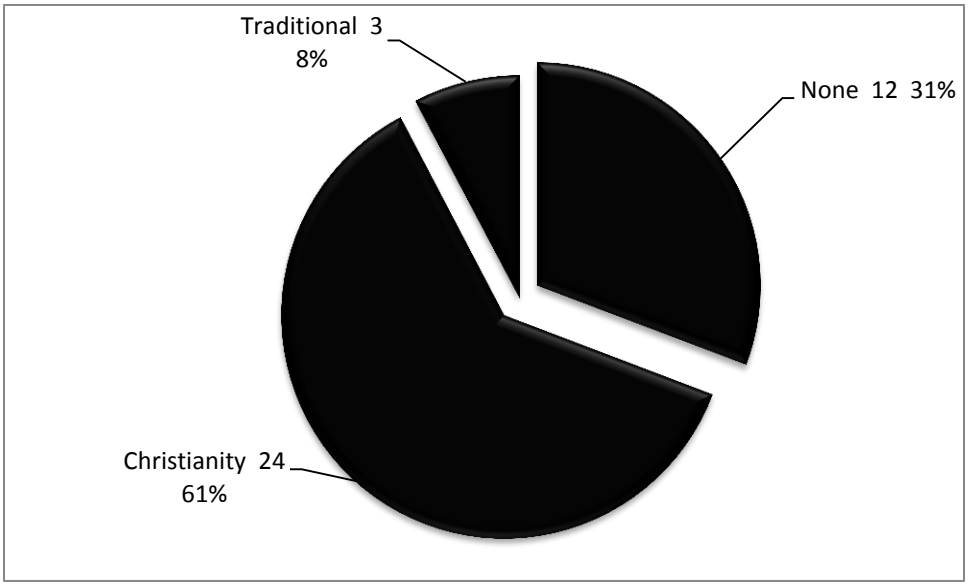

Figure 4.1: Distribution of Religion of the respondents (n=39)

Figure 4.1 shows the respondents' religion distribution. The majority (61.0%, n=24) of the respondents were Christians, 31.0% (n=12) had no religion and 8.0% (n=3) were traditionalists.

4.2.2 Disclosure issues

A. The duration since HIV Diagnosis

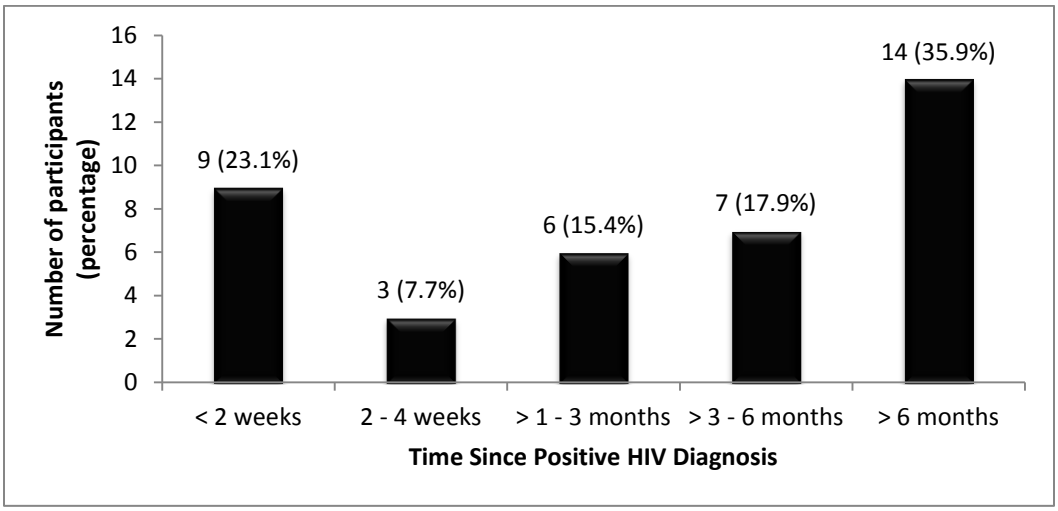

Figure 4.2: Distribution of the duration since HIV Diagnosis (N=39)

Figure 4.2 summarises the distribution of the duration the respondents were aware of their HIV-status. A total of35.9% (n=14) were aware of their status for more than six months ago, 23.1% (n=9) were aware for less than two weeks ago, 17.9% (n=7) were aware for more than three to six months ago, 15.4% (n=6) were aware for more one to three months ago and 7.7% (n=3) were aware for more than two weeks to four weeks ago.

B. Disclosure of HIV status to anyone, excluding health care professionals

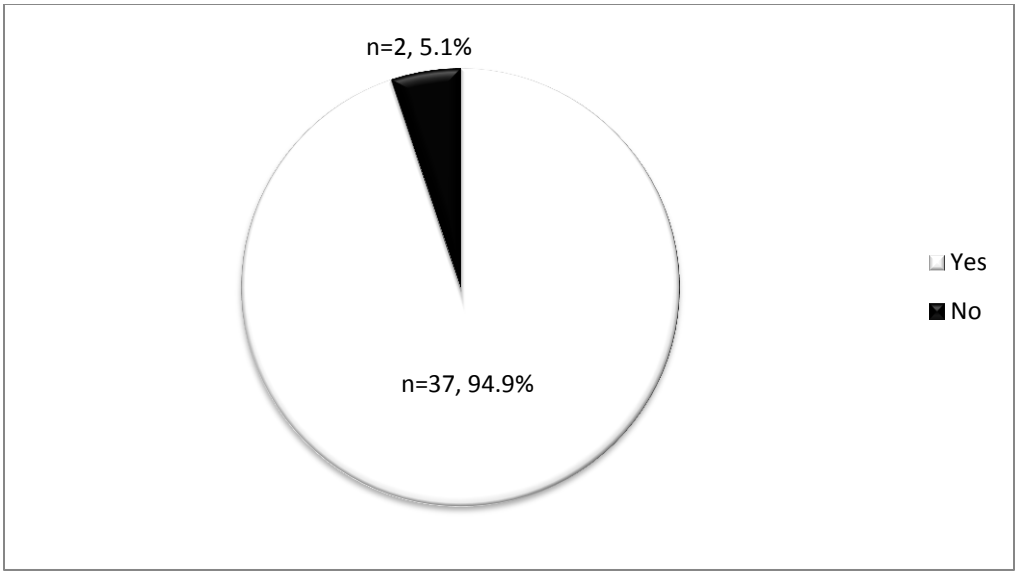

Figure 4.3: Disclosure of HIV status to anyone, excluding health care professionals (N=39)

In Figure 4.3, most of the respondents (94.9%, n=37) had disclosed their HIV status to somebody else than a health care provider whereas 5.1% (n=2) did not disclose their status to anybody else

C. The number of people respondents told about their HIV positive status

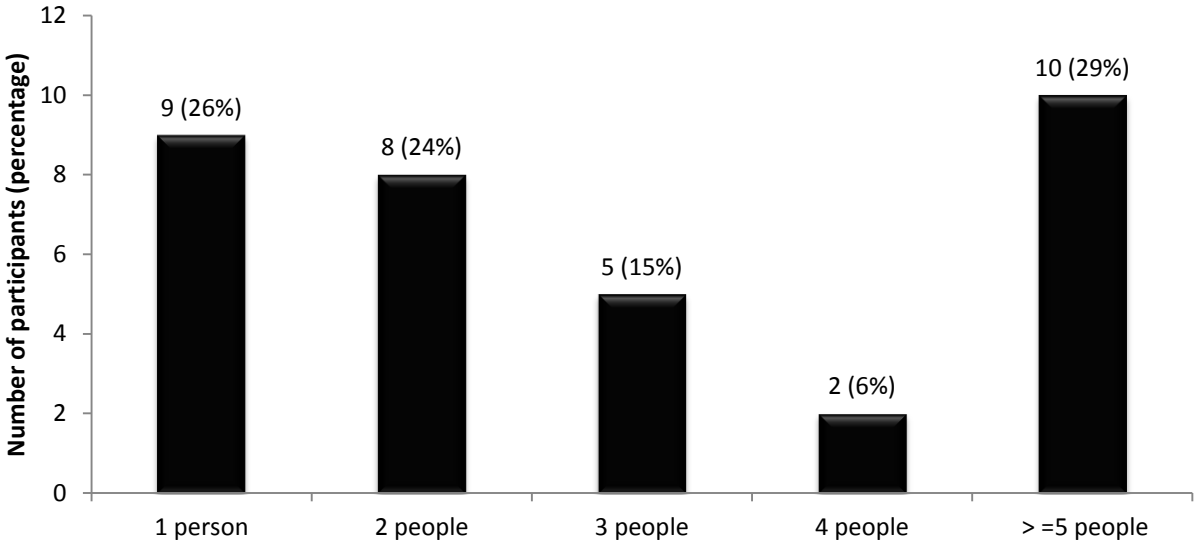

Figure 4.4: Distribution of the number of people respondents told about their HIV positive status (N=34)

In Figure 4.4, of the 34 respondents, 29.0% (n=10) disclosed their HIV to more than five people, 26.0% (n=9) disclosed to one person, 24.0% (n=8) disclosed to two people, 15.0% (n=5) disclosed to three people and 6.0% (n=2) disclosed to four people.

D. The people to whom the respondents disclosed their HIV status

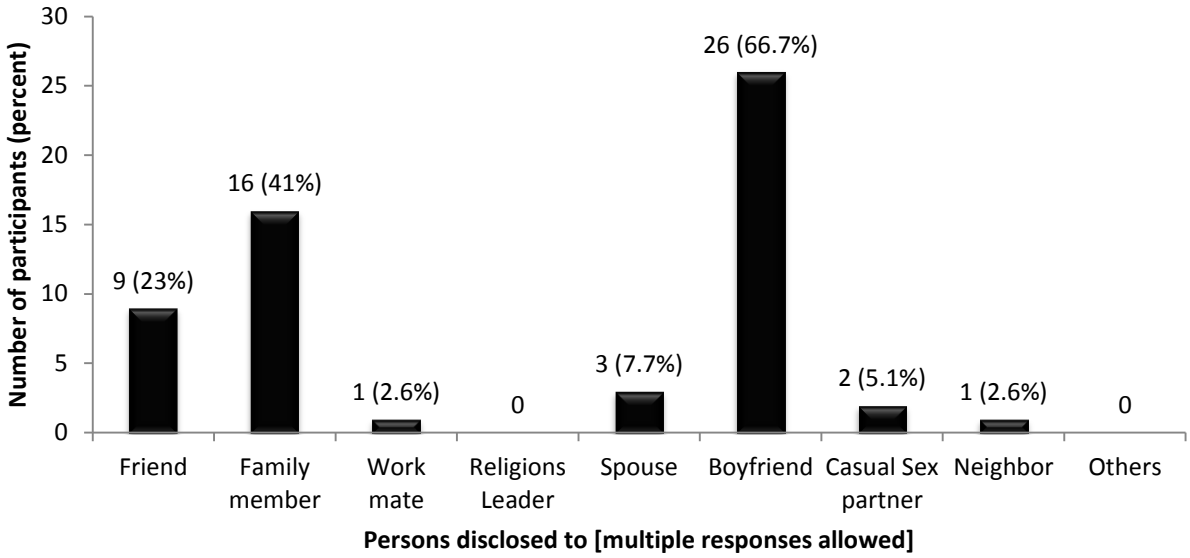

Figure 4.5: The distribution of the people the respondents disclosed their HIV status to

As can be seen in Figure 4.5, respondents were asked to list the people they disclosed their HIV status to and multiple answers were allowed. The majority (66.7%, n=26), had disclosed to their boyfriend, 41.0% (n=16) had disclosed to a family member, 23.0%, (n=9) to friend, 7.7% (n=3) to the spouse, 5.1% (n=2) to the casual sex partner, 2.6% (n=1) to a work mate, 2.6% (n=1) to the neighbour and none disclosed to a religious leader.

E. The length of time taken before disclosure

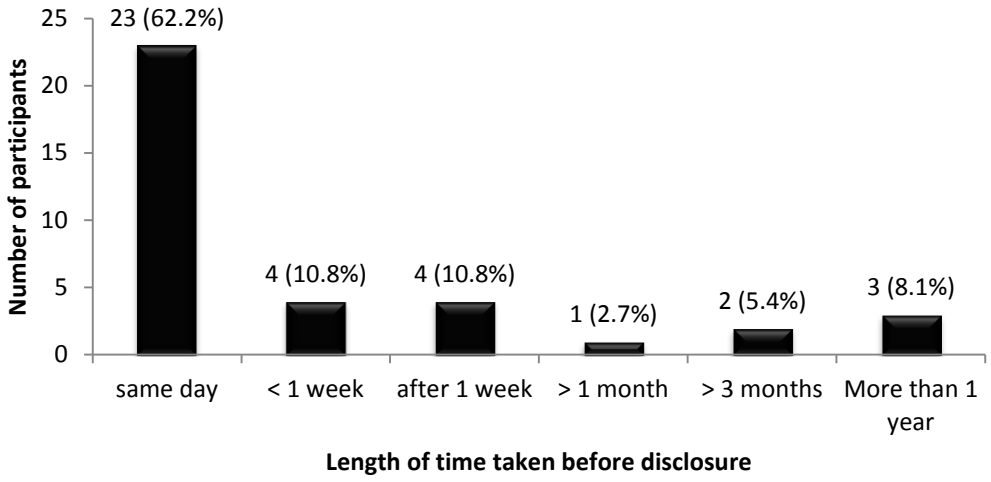

Figure 4.6: The distribution of length of time taken before disclosure (N=37)

In Figure 4.6, most of the respondents (62.2%, n=23) disclosed their HIV status to another person in the same day, 10.8% (n=4) disclosed in less than a week, 10.8% (n=4) disclosed after a week, 8.1% (n=3) disclosed after a year, 5.4% (n=2) disclosed after three months and 2.7% (n=1) disclosed after a month. This was consistent with the findings by Deribe et al. (2007) where time from diagnosis to disclosure varied from same day to two years. Different to a study among pregnant women, Medley et al. (2004) found that 22.0% of the participants had disclosed within two months and 41.0% had disclosed by the fourth year.

F. The HIV status disclosure to sexual partner

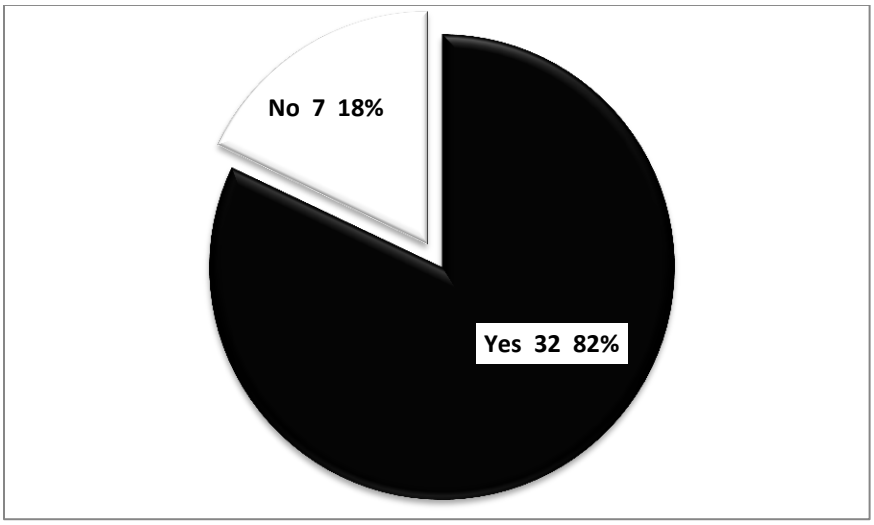

Figure 4.7: The distribution of HIV status disclosure to sexual partner (N=39)

In Figure 4.7, the majority of the respondents (82.0%, n=32) had disclosed their HIV status to their sexual partners whereas, 18.0% (n=7) did not disclose their status to their sexual partners. The findings in this study do correspond with similar studies as it is shown in the literature that disclosure to partners varies from 42.2% to 90.0% (Deribe et al., 2007; Brou et al., 2007). Mmelesi et al. (2010) also found that majority of married or cohabiting couples in Botswana, do not disclose their HIV status to their partners because they go for counselling and testing alone.

G. The time taken to disclose the HIV status to sexual partner since diagnosis

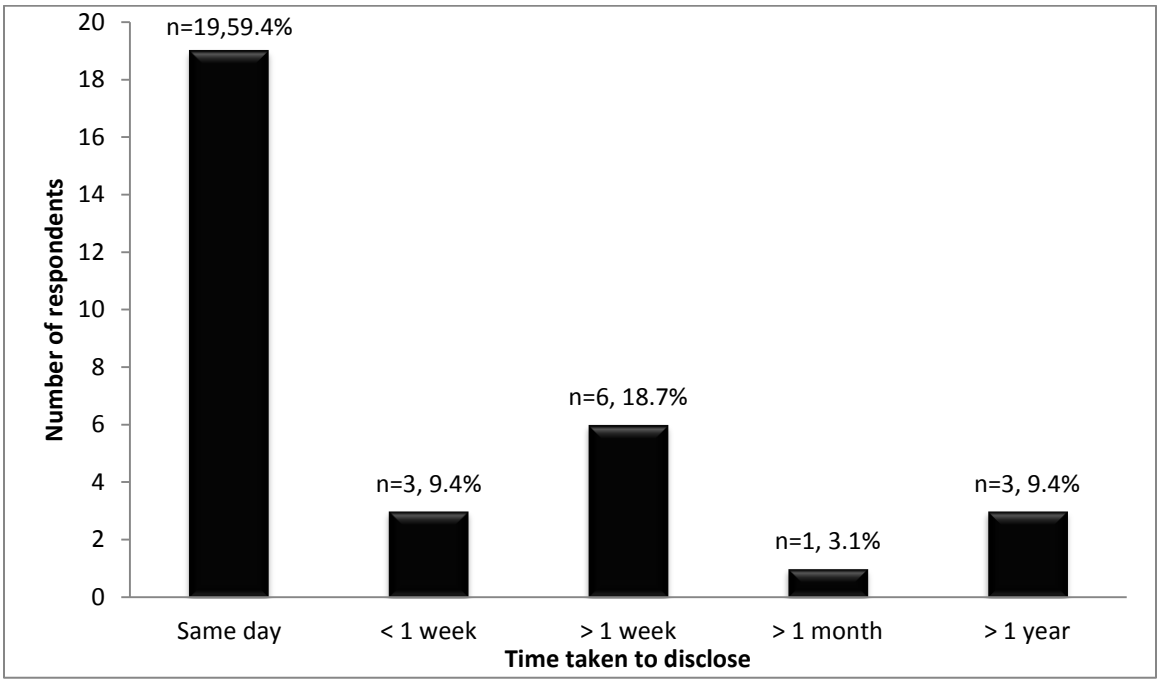

Figure 4.8: Distribution of time taken to disclose the HIV status to sexual partner since diagnosis (N=32)

As can be seen in Figure 4.8, most respondents (59.4%, n=19) disclosed their HIV status to the sexual partner on the same day they tested, 18.7% (n=6) after a week, 9.4% (n=3) in less than a week, 9.4% (n=3) after a year and 3.1% (n=1) after a month.

H. The perception by respondents as to what prevents people to disclose their HIV status

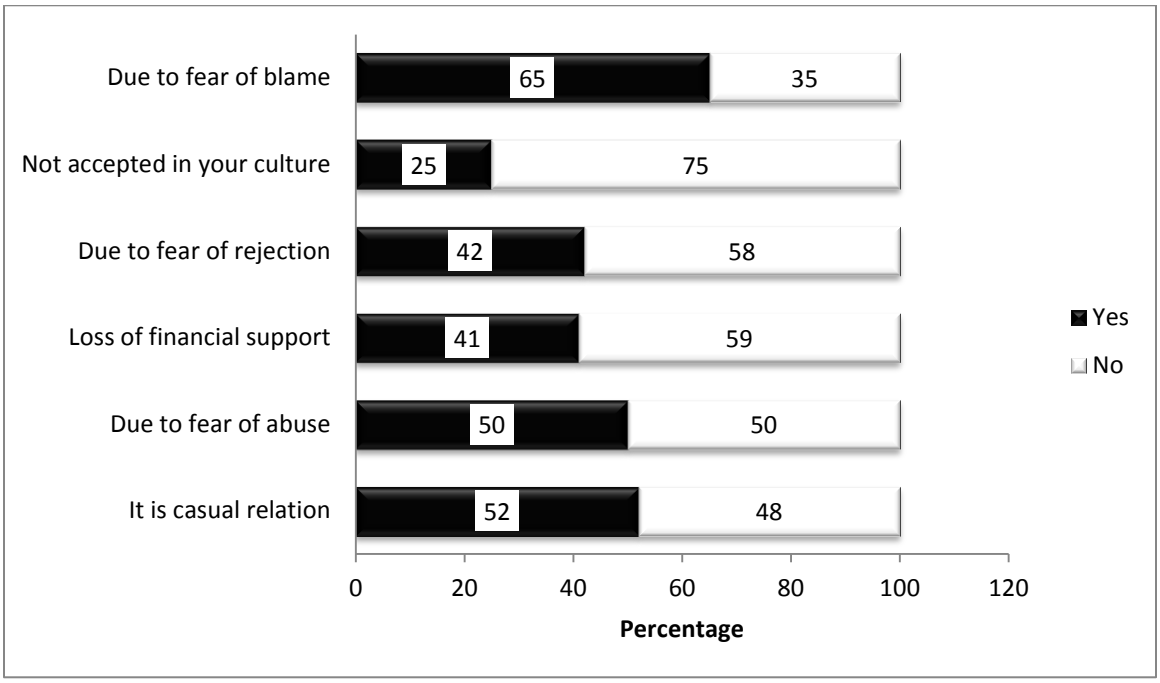

Figure 4.9: Distribution of the perception by respondents as to what prevents people to disclose their HIV status

In Figure 4.9, respondents were given a list of some of the reasons that prevent people from disclosing their HIV status to their partners and they were asked to answer yes or no. Sixty five percent (65.0%) said that people do not disclose their status to the sexual partners due to fear of blame whereas 35.0% did not think so. Fifty two percent (52.0%) said that people do not disclosure their HIV status during casual relationships whereas 48.0% did not say so. Half of the respondents (50.0%) said yes whereas the other half (50.0%) said no to fear of abuse being one of the reasons for non-disclosure. Fear of rejection was said to be a reason for non-disclosure by 42.0% of respondents, loss of financial support was said to be one of the reasons by 41.0% of respondents and disclosure practices not accepted in the culture was said to be one of the reason for non-disclosure by 25.0% of the respondents. Others reasons listed by the respondents were fear of separation, difficult partner and lack of confidentiality.

It can be argued that fear of blame and fear of rejection after disclosure fall within the definition of what stigmatization constitutes in an HIV context. And in this context, Wolfe et al. (2006), in a survey of HIV patients receiving ART in Botswana, found that stigma often prevents disclosure of an HIV-positive status to partners, health care providers and family members. Similarly, Kalichmana and Simbayab (2004) found that in South Africa, the fear of stigmatisation was a major justification for non-disclosure of HIV-positive status.

I. The suggestions to help disclosure of HIV status

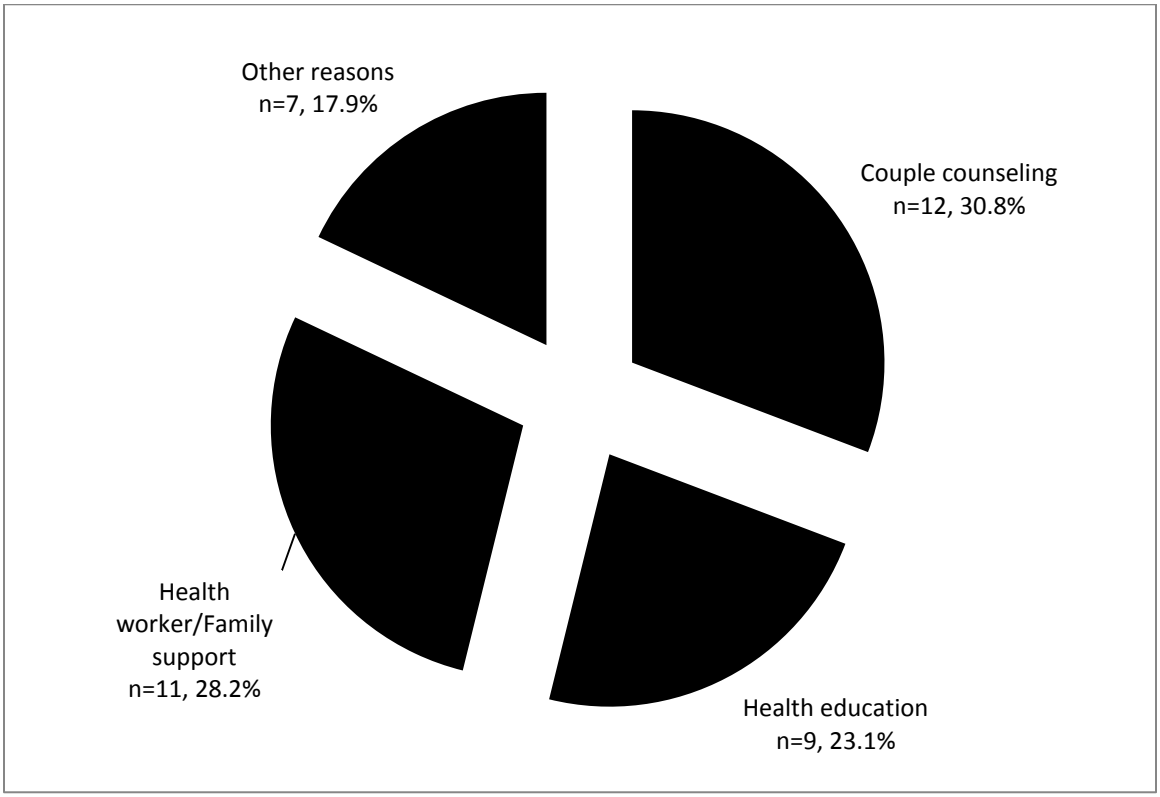

Figure 4.10: Distribution of suggestions to help to disclose

Figure 4.10 summarises the suggestions given by respondents which could help disclosure. Some suggested that couple counselling and testing will assist with disclosure (30.8%, n=12), health education was suggested by 9 (23.1%) respondents,

health worker support was suggested by 11 (28.2%) respondents and family support was suggested by 7 (17.9%) respondents.

4.2.3 Social information

A. The respondents' alcohol consumption habits

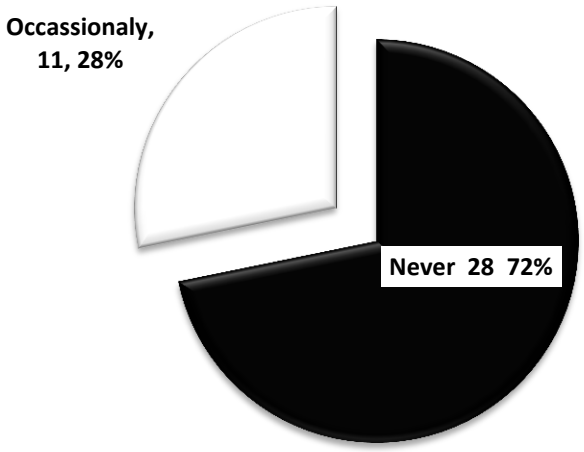

Figure 4.11: Distribution of respondents' alcohol consumption habits (N=39)

As can be seen in Figure 4.11, most respondents (72.0%, n=28) did not drink alcohol and only 28.0% (n=11) consumed alcohol occasionally.

B. The respondents' current number of sexual partners

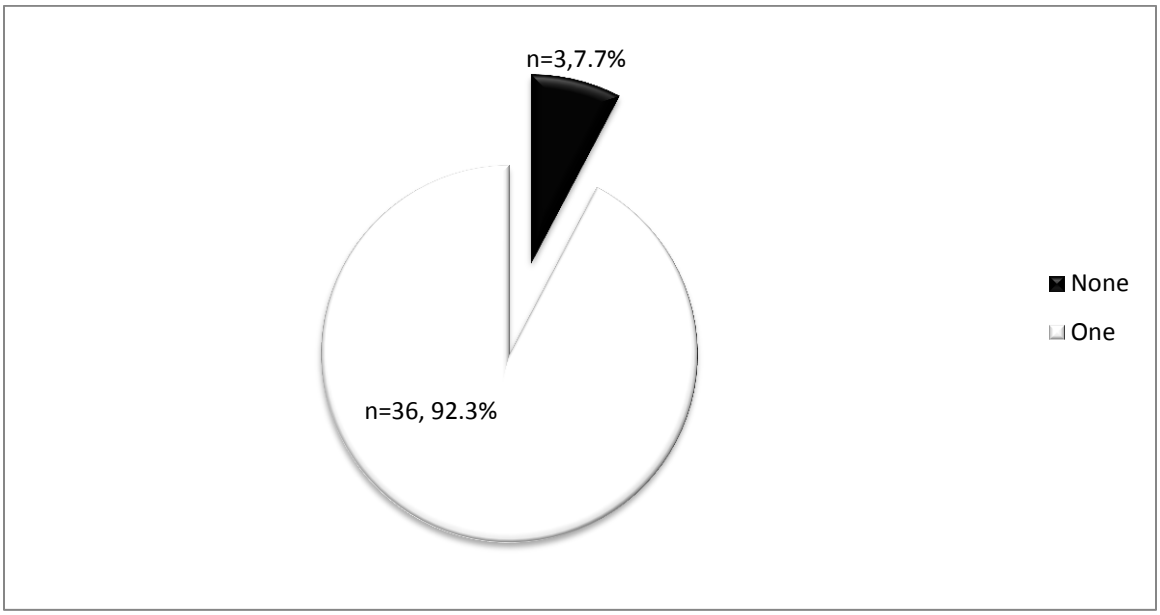

Figure 4.12: The distribution of respondents' current number of sexual partners (N=39)

In Figure 4.12, respondents were asked about how many sexual partners they have at the time of the research and majority of them (92.3%, n=36) had only one sexual partner while 7.7% (n=3) had no sexual partner at the time of the research. No respondents had more than one sexual partner.

C. The respondents' time together in the current relationship

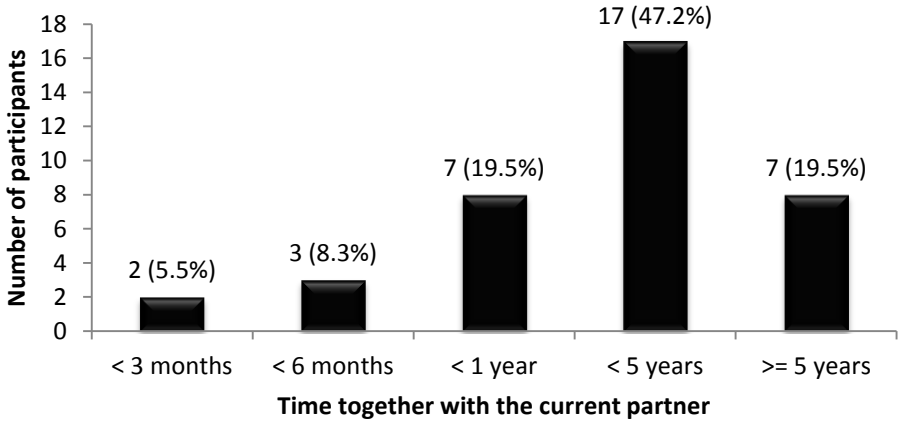

Figure 4.13: The distribution of the respondents' time together in the current relationship

In Figure 4.13, most respondents (47.2%, n=17) were in the current relationship for less than 5 years, 19.5% (n=7) for less than a year, 19.5% (n=7) more than five years, 8.3% (n=3) less than six months and 5.5% (n=2) for less than three months

D. HIV Status of the partner

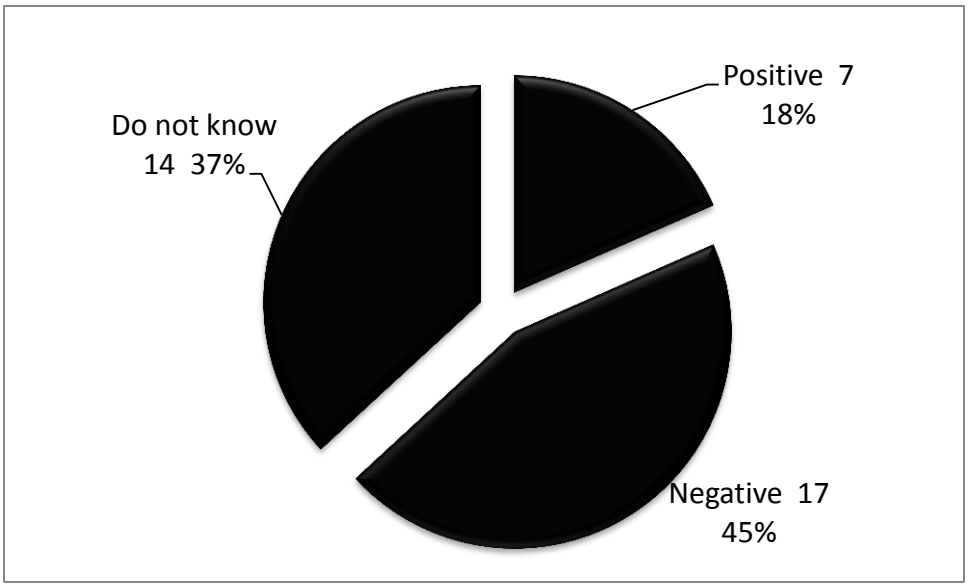

Figure 4.14: Distribution of HIV Status of the partner (N = 38)

In Figure 4.14, 45.0% (n=17) of partners to the respondents were HIV negative, 37.0% (14) of the respondents did not know the HIV status of their partners and 18.0% (n=7) of the partners were HIV positive.

4.2.4 Additional Analysis

This section reports results of cross tabulations done to find out if possible associations exist between disclosure of HIV status to sexual partners and factors such marital status, age, employment status, education status, income, number of sexual partners, alcohol consumption, knowledge of the partner's HIV status, time since diagnosis, time taken to disclose since HIV diagnosis, duration of the relationship and religion.

A. Disclosure and Marital status.

Table 4.2: Distribution of the disclosure to the sexual partner by marital status (N=39)

Disclosure to sexual partner	Marital status of respondents				
	Never married	Married	Co-habiting	Divorced/Separated	Total
Yes	23	4	5	0	32
No	4	0	1	2	7
Total	27	4	6	2	39

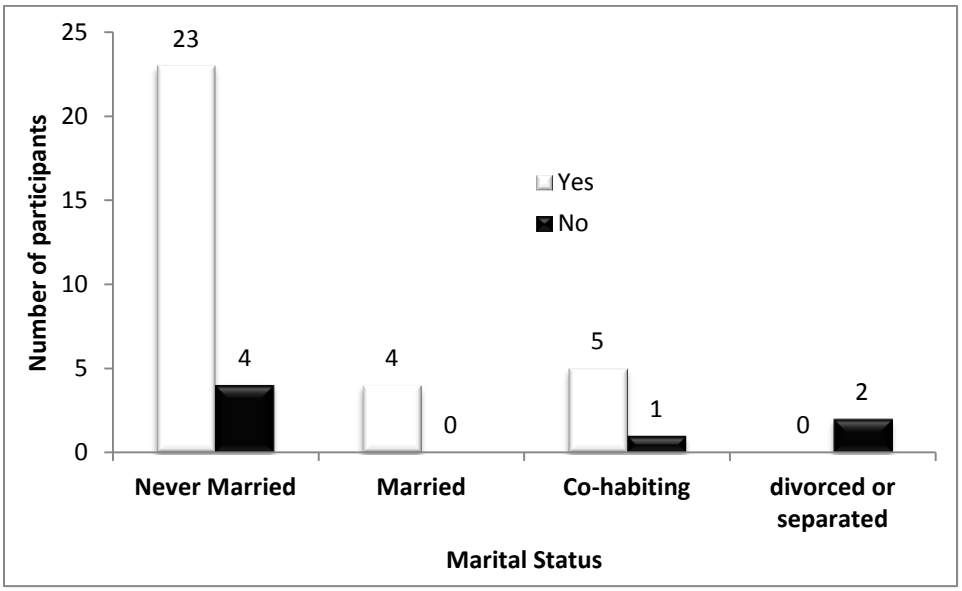

Figure 4.15: Distribution of the disclosure to the sexual partner by marital status (N=39)

There was no significant association between disclosure and the marital status. Two of two (100%) divorced and separated respondents did not disclose their HIV status. Four of seven (57.0%) of those who never married also did not disclose to their sexual partners. The majority of the respondents were never married (69.2%, n=27) and (62.2%, n=23) disclosed their HIV status to their partners.

B. Disclosure and Age

Table 4.3: Distribution of the disclosure to the sexual partner by age (N=39)

Disclosure to sex partner	Age (years)				Total
	21-25	26-30	31-35	>35	
Yes	18	5	4	5	32
No	4	1	1	1	7
Total	22	6	5	6	39

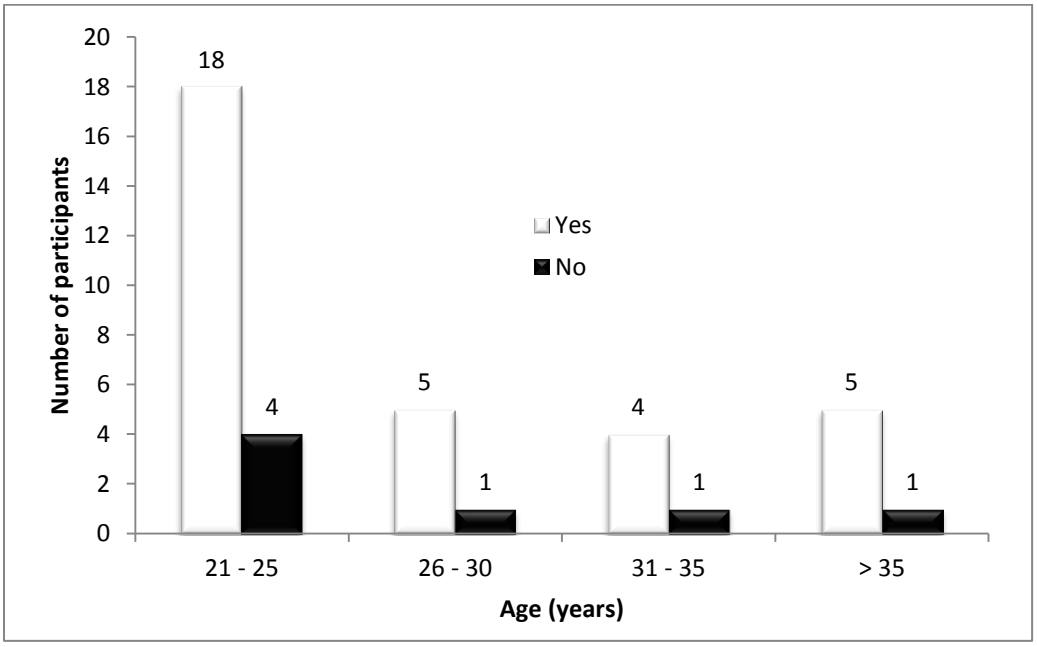

Figure 4.16: Distribution of the disclosure to the sexual partner by age (N=39)

There was no significant association between age and disclosure to sex partner. Although four out of seven (57.0%) of those who did not disclose their HIV status to sexual partners where less than 25 years of age. The majority of respondents (56.3%, n=18) who disclosed their HIV status to their sexual partners were between 21 and 25 years of age; which is in contrast to the findings of Farquhar et al (2000), who reported that 65.0% HIV positive pregnant women aged less than 24 years disclosed their HIV status to their partners.

The findings in this study are also not supported by the results of Medley et al. (2004) who conducted a study on disclosure among women and noted that women under the age of 24 years were more likely to disclose their status than older women. This study's results were also not supported by O'Brien et al. (2003) who found that individuals between the ages of 22 to 35 years were more likely to disclose their status to the sexual partners and individuals over the age of 35 years were more likely to disclose their status to a friend.

C. Disclosure and Employment

Table 4.4: Distribution of the disclosure to the sexual partner by employment (N=39)

Disclosure to sexual partner	Employment status		Total
	Employed	Not employed	
Yes	11	21	32
No	2	5	7
Total	13	26	39

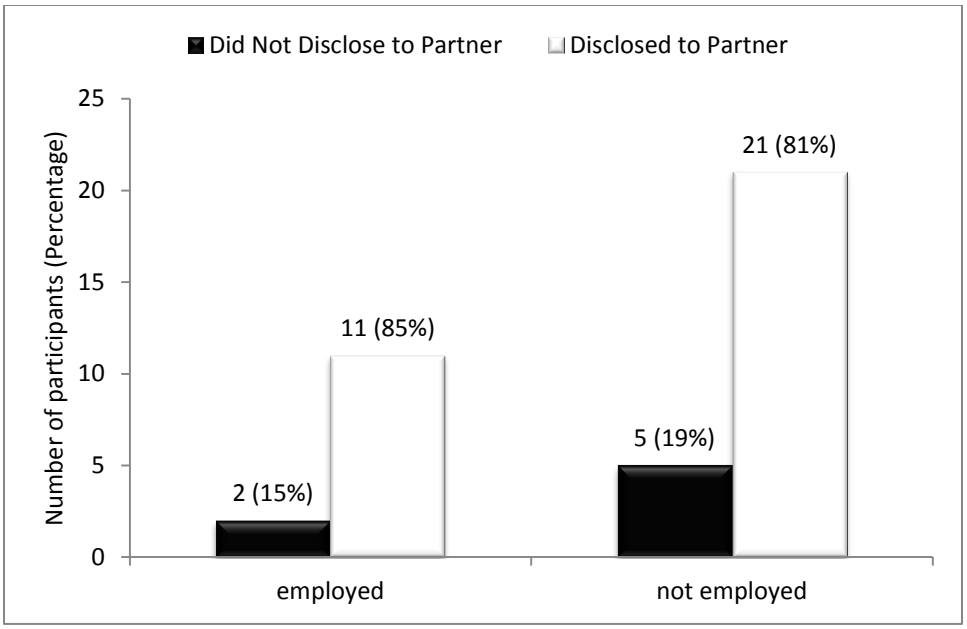

Figure 4.17: Distribution of the disclosure to the sexual partner by employment (N=39)

Disclosure and Employment were not significantly associated when employment status was categorised in employed and not employed. From Figure 4.17; 85.0% of the employed respondents compared to 81.0% of the unemployed respondents disclosed their HIV status to their sexual partner.

D. Disclosure and Religion

Table 4.5: Distribution of the disclosure to the sexual partner by religion (N=39)

Disclosure to partner	Religion			Total
	None	Christianity	Traditional	
No	5	2	0	7
Yes	7	22	3	32
Total	12	24	3	39

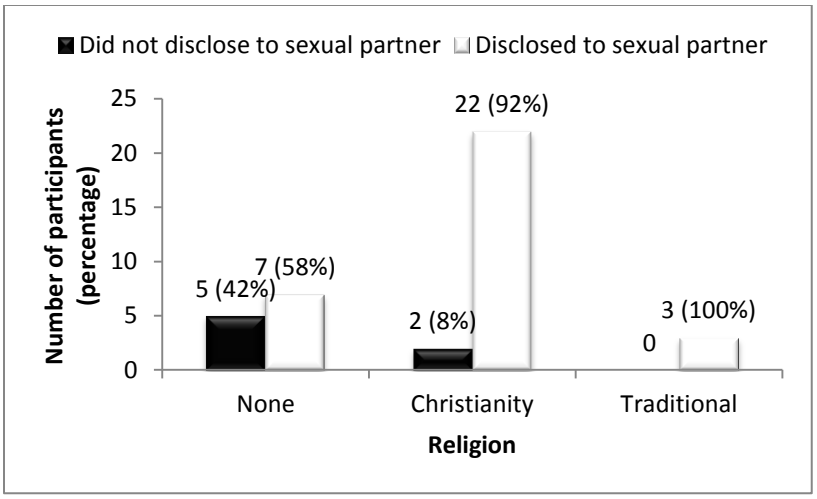

Figure 4.18: Distribution of the disclosure to the sexual partner by religion (N=39)

In Figure 4.18, it is shown that majority of Christian (92.0%, n=22) disclosed their status, 58.0% (n=7) of non-believers or those without any religion disclosed, whereas 100% of the traditionalist disclosed their HIV status. The association between disclosure to sex partner and religion was not statistically significant.

According to Zou et al. (2008), the fear of being stigmatized is closely related to religion. Religious beliefs affect HIV positive status disclosure as it may be associated with the conviction held, in some religions, as punishment from God.

E. Disclosure and Education

Table 4.6: Distribution of disclosure to sexual partner by education (N=39)

Disclosure to partner	Education level			Total
	Primary	Secondary	Tertiary	
No	0	6	1	7
Yes	2	22	8	32
Total	2	28	9	39

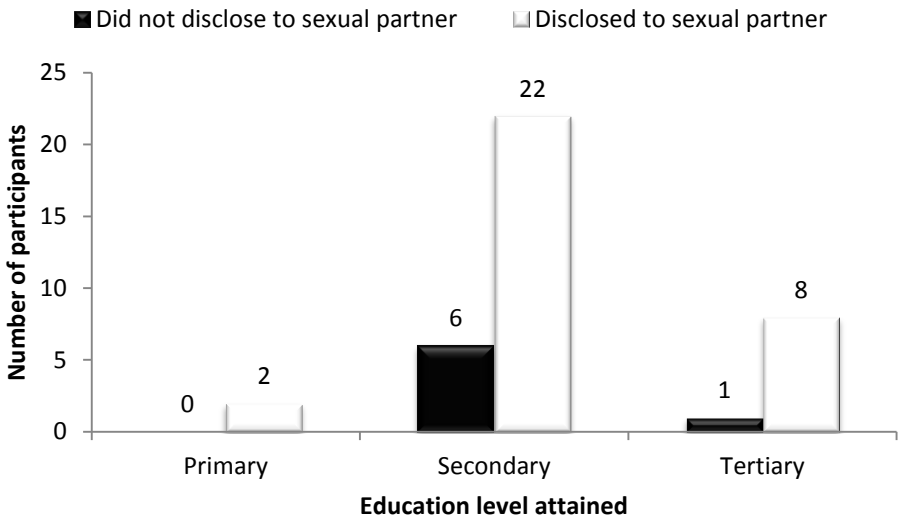

Figure 4.19: Distribution of disclosure to sexual partner by education (N=39)

There was no significant association between disclosure to sexual partner and respondents' education level. The majority of respondents (n=28) had secondary education as their high level and 22 of these disclosed their HIV status.

F. Disclosure and Income

Table 4.7: Distribution of disclosure to sexual partner by monthly income (N=39)

Disclosure to partner	Income	No income	Total
No	2	5	7
Yes	15	17	32
Total	17	22	39

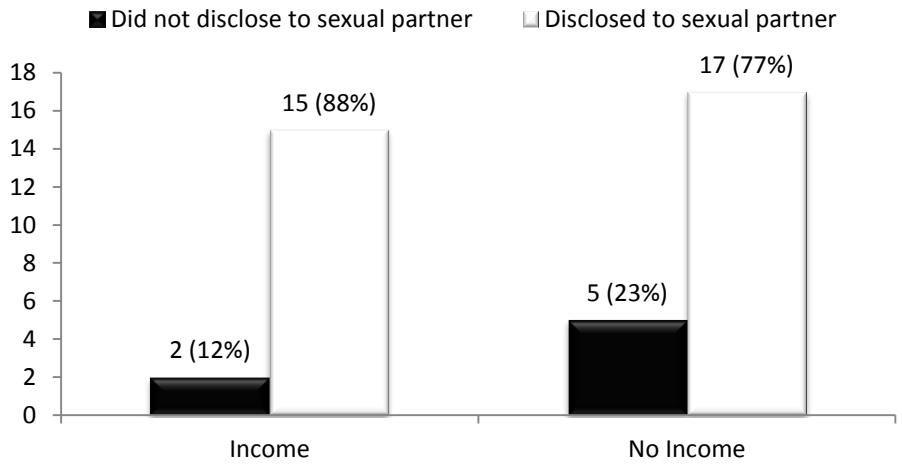

Figure 4.20: Distribution of disclosure to sexual partner by monthly income (N=39)

There was no significant association between disclosure to sexual partner and respondents' monthly income. As shown in Figure 4.20, 88.0% of the respondents with monthly income compared to 77.0% of respondents with no monthly income disclosed their HIV status to the partners.

G. Disclosure and HIV Status of Partner

Table 4.8: Distribution of disclosure to sexual partner by HIV status of partner (N=38)

Disclosure to partner	Partner's HIV status		Total
	Known	Unknown	
No	0	7	7
Yes	24	7	31
Total	24	14	38

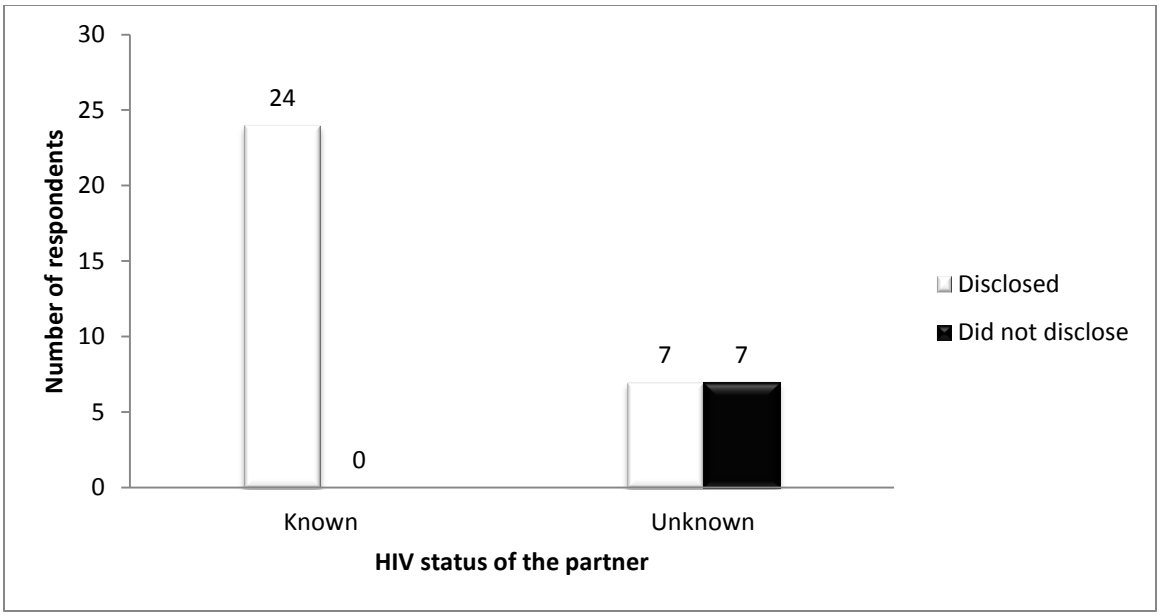

Figure 4.21: Distribution of disclosure to sexual partner by HIV status of partner (N=38)

Table 4.9: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.710b	1	.000		
Continuity Correctiona	11.571	1	.001		
Likelihood Ratio Fisher's exact Test	16.898	1	.000	.000	.000
Linear-by-Linear association	14.323	1	.000		
N of Valid Cases	38				

a. Computed only for a 2x2 table

b. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.58.

As can be seen in Tables 4.8 and 4.9, all respondents (n=24) who knew their partner's HIV status, disclosed their HIV status to their partner while 17.9% of respondents (n=7) who did not know the HIV status of their partner, also disclosed their HIV status to their

partner. All respondents (n = 7) who did not know their partner's HIV status, did not disclose their HIV status to their partner. There was a significant association between the knowledge of HIV status of the partner and disclosure to the partner [X^2 (1) = 16.89; p < 0.001]. Respondents were less likely to disclose their HIV-status to their partner if they did not know the partner's HIV status compared to knowing that partner's status.

Similarly to these results, Gari et al. (2010) conducted a study among women attending an ART clinic in Ethiopia and found that women were less likely to disclose to their partner if they did not know the partner's status. In a similar study done in Ethiopia individuals were less likely to disclose to a partner they thought was negative or unaware of their status than to a HIV positive partner (Deribe et al 2007).

H. Disclosure and duration of the relationship

Table 4.10: Distribution of disclosure and duration of relationship (N=36)

Disclosure to sexual partner	How long are you together with your current partner?					Total
	<3months	<6months	<1year	<5years	>=5years	
Yes	2	1	7	12	7	29
No	0	2	0	5	0	7
Total	2	3	7	17	7	36

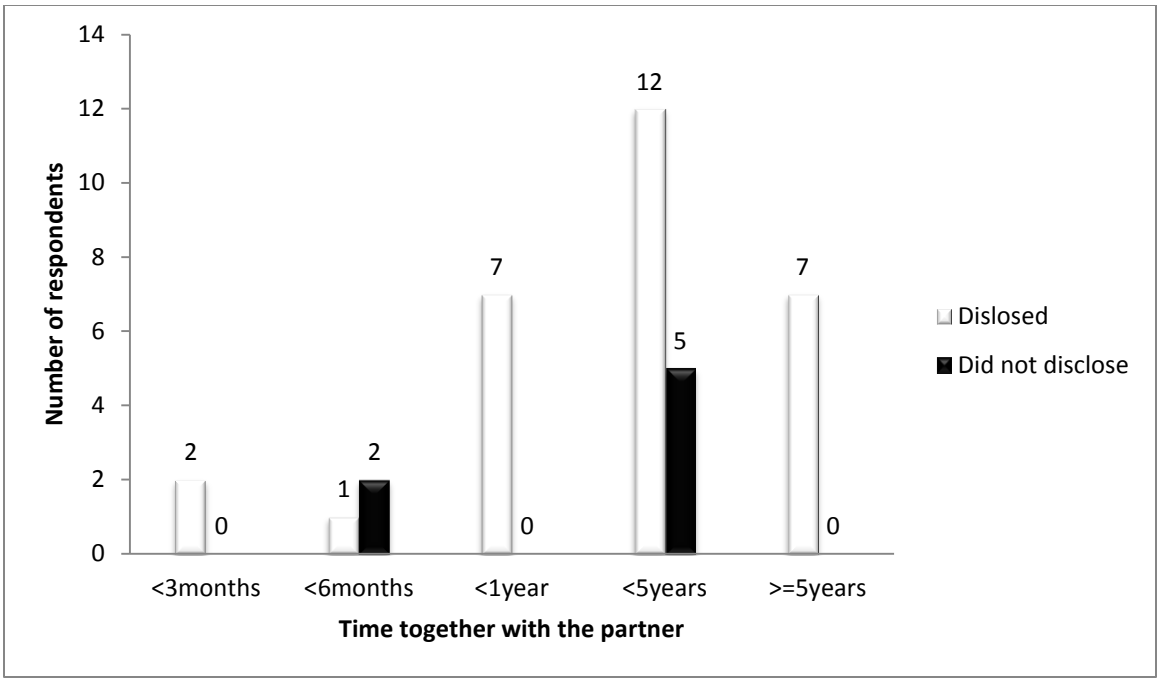

Figure 4.22: Distribution of disclosure and duration of relationship

There was no significant association between disclosure to sexual partner and the duration of the relationship among the respondents. This is not in support of findings from other studies by Chaudoir et al., 2011; Deribe et al., 2007 and Gari et al., 2010 which have consistently shown that disclosure rates were significantly higher among permanent partners than casual partners.

I. Disclosure and Time since HIV diagnosis

Table 4.11: Distribution of disclosure and time since HIV diagnosis (N=39)

Disclosure to partner	Respondents' time since diagnosis							Total
	1 week	2 weeks	1 month	3 months	6 months	1 year	>1year	
No	2	0	0	1	0	2	2	7
Yes	7	1	2	5	7	1	9	32
Total	9	1	2	6	7	3	11	39

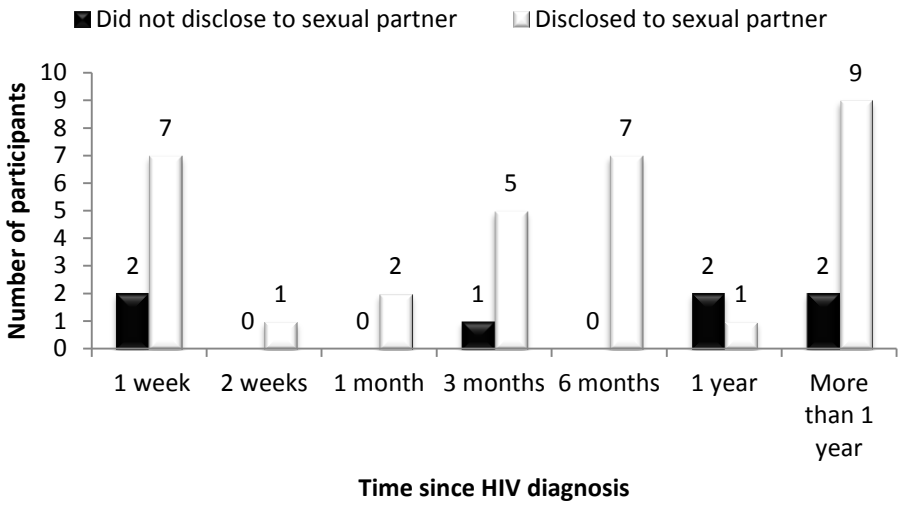

Figure 4.23: Distribution of disclosure and time since HIV diagnosis (N=39)

There was no significant association between the disclosure to sexual partner and the time the respondents was aware of their HIV status.

J. Disclosure and time taken to disclosure since HIV diagnosis

Table 4.12: Distribution of Disclosure and time taken to disclosure since HIV diagnosis (N=37)

Disclosure to partner	Time taken to disclosure since HIV diagnosis						Total
	Same day	<1week	>1week	>1month	>3months	>1year	
Yes	22	3	2	0	2	3	32
No	1	1	2	1	0	0	5
Total	23	4	4	1	2	3	37

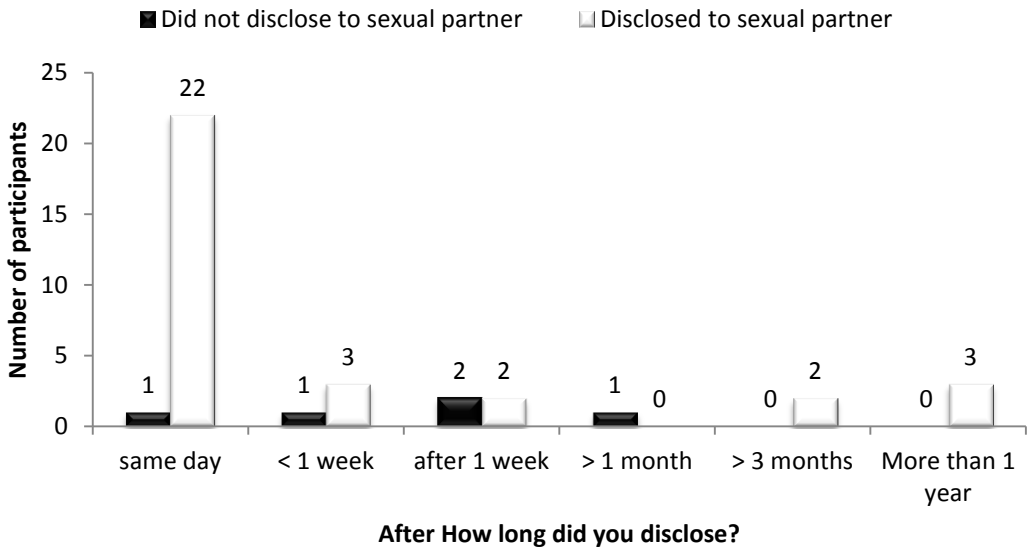

Figure 4.24: Distribution of Disclosure and time taken to disclosure since HIV diagnosis (N=37)

There was no significant association between the disclosure rates to sexual partners and time from diagnosis to disclosure.

K. Disclosure and alcohol

Table 4.13: Distribution of disclosure by alcohol consumption of the respondents (N=39)

Disclosure to Sex Partner		Alcohol consumption		
		Never	Occasionally	Total
	Yes	21	11	32
	No	7	0	7
Total		28	11	39

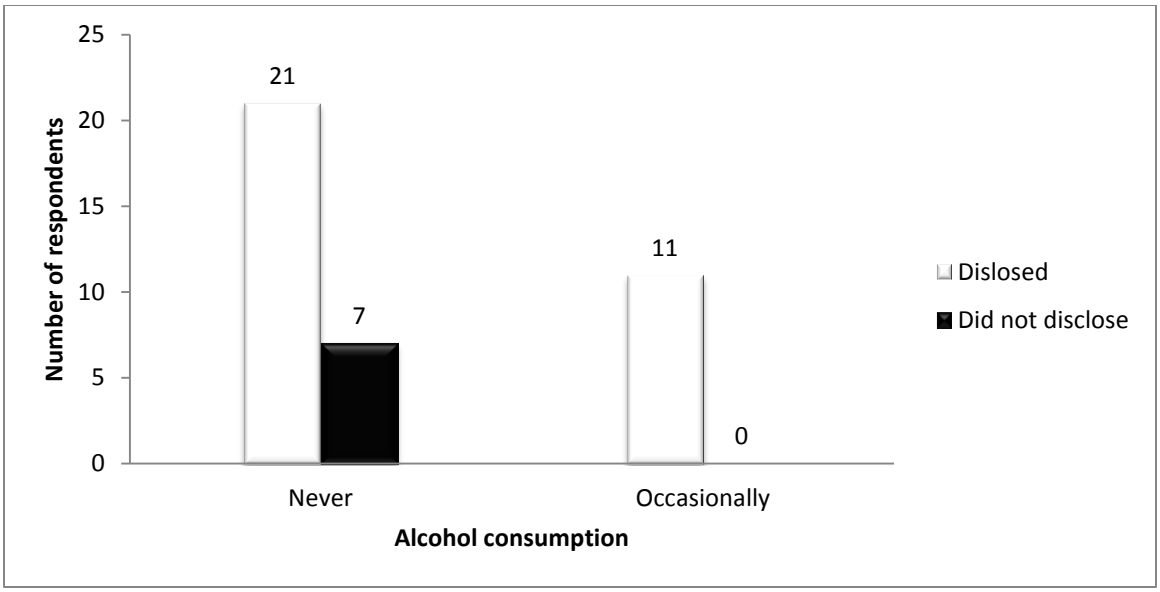

Figure 4.25: Distribution of disclosure by alcohol consumption of the respondents (N=39)

As it can be seen in Figure 4.25, all those respondents who did not disclose (n=7) to their partners stated that they do not drink alcohol. There was no significant association between disclosure and alcohol consumption.

L. Disclosure and number of sexual partners

Table 4.14: Distribution of disclosure by number of sexual partners (N=39)

Disclosure to Sex Partner	Number of sexual partners		
	None	One	Total
Yes	1	31	32
No	2	5	7
Total	3	36	39

Fishers exact = 0.077

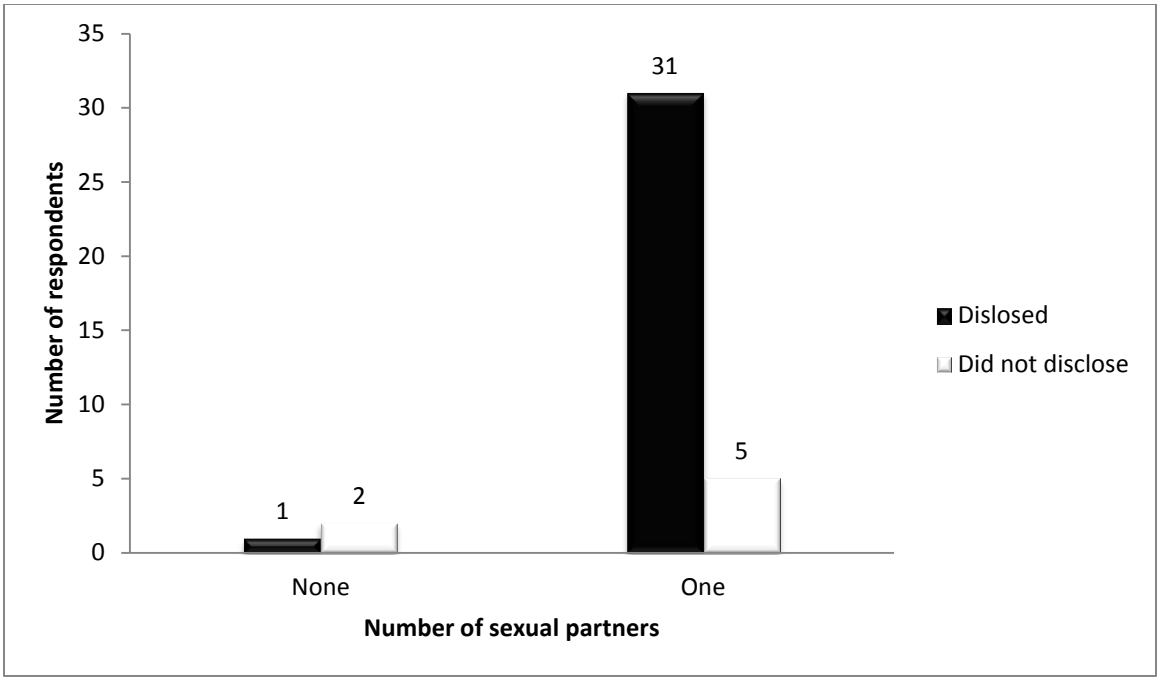

Figure 4.26: Distribution of disclosure by number of sexual partners (N=39)

There was no significant association between disclosure to sexual partner and number of sexual partners. As shown in Figure 4.26, most respondents stated that they had only one current partner.

4.4 DISCUSSION

This study showed that in Kgatleng, Botswana, the majority of HIV-infected women do disclose their diagnosis to their partners and other people around them. In total, 82.0% of HIV positive women receiving care at seven SRH settings in Kgatleng, Botswana have disclosed their status to their partners. This rates fall within the ranges of 42.2% to 90.0% found in other studies by Deribe et al. (2007) and Brou et al. (2007). This current study's disclosure rate is higher than the 81.0 % disclosure rates reported in a study by Forsyth et al (2006) among South African postpartum women and 40.0 % disclosure

rates reported by Antelmann et al (2001) among HIV infected pregnant women from Dar es Salaam, Tanzania. Respondents suggested that to facilitate disclosure the following must be promoted; couple counseling (n=12, 30.8%), health worker and family support (n=11, 28.2%), health education (n=9, 23.1%).

4.4.1 Demographic factors

The majority of respondents (56.4%) were between the age of 21 and 25 years, about 84.6% of respondents were single, 61.0% were Christians, 66.7% were unemployed and 56.4% had no income. All but two (94.9%, n=37) of respondents in this study have disclosed their HIV status to someone other than the health care professional. The findings in this study suggest that no demographic factors such as age, marital status, education level, income, employment status, religion, influenced the disclosure of HIV positive status to sexual partner among the respondents.

These findings are not supported by Forsyth et al. (2006) who found that women were more likely to disclose their HIV status to their partner if they were married, had held prior discussions with their partner about HIV testing or had a partner with a tertiary level of education. Deribe et al. (2007), in their study found that unemployment is related to no income and being dependant on others, which results in reluctance to disclose, which were not supported by the findings in this study. The results of this study pertaining to disclosure and religion are also not supported by Zou et al (2008) study which found that religious beliefs affect HIV positive status disclosure as it may be associated with the conviction held, in some religions, that it is a punishment from God.

4.4.2 Social factors

In this study, social factors like number of sexual partners, alcohol consumption, duration of relationship, time since HIV diagnosis, time taken to disclose since HIV diagnosis, were not found to be significantly associated with disclosure.

However, knowledge of the sexual partner's HIV status was found to be statistically associated with disclosure [$\chi 2(1) = 16.89$; $p < 0.001$]. Respondents were less likely to disclose their HIV-status to their partner if they did not know the partner's HIV status compared to knowing that partner's Status. Other factors that were thought to influence HIV positive status disclosure were fear of blame (65.0%), casual relationships (52.0%) and fear of abuse (50.0%).

CHAPTER 5: LIMITATIONS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this study was to identify factors affecting HIV status disclosure among pregnant women one rural district in Botswana.

This chapter sums up the findings of the research; outlines the implications of the study's results; provides conclusions based on the research findings; makes recommendations for improving disclosure support services in Botswana and for further research. The limitations, impacting on the generalizability of the findings, are also specified.

5.2 LIMITATIONS OF THE RESEARCH

The limitation of this study was that the study targeted a specific population (ANC follow up clinic attendees) in a comprehensive HIV care setting, so the findings may not be generalized to other populations and settings. This study was also limited to one rural health district and it was difficult to make generalizations based on the small sample size. A larger sample size and comparison with an urban setting could have been more helpful for this study.

This research utilised one data collection approach and richer data could be obtained by triangulation of data collection methods or even triangulation the research methodologies such as utilizing a qualitative approach as well.

Inferential analyses revealed that only the knowledge of HIV status of the partner were significantly associated with the disclosure to the partner. The lack of other significant associations found in this study could be ascribed to the relatively small respondent size and possible hesitation or bias on the part of those who did not want to respond openly or accurately. It is possible that this sample might have had good disclosure rates, and that the seemingly higher reporting for disclosure indicated that the population was

aware and adjusted to the particular socio-demographic factors and other variables that impacted negatively on disclosure.

5.3 CONCLUSION

The level of disclosure among HIV pregnant women in this health district of Botswana was moderately excellent. All but two respondents had disclosed their HIV status to someone other than a health worker and 82.0% of the disclosed to their sexual partners. The majority of the respondents disclosed their status within the same week of diagnosis though it was not found to be significantly associated with disclosure.

Lack of knowledge of HIV status of a sexual partner was found to be significantly associated with disclosure to that sexual partner. Factors such as age, education status, employment status, income, religion, marital status were not found to be significantly associated with disclosure.

Since studies have reported stigmatization to be one of the factors contributing to non-disclosure of HIV status, it was important to assess the magnitude of this problem. In this context, respondents reported that fear of blame (65.0%) and fear of rejection (42.0%) to be some of the reasons thought to contribute to non-disclosure. Fear of abuse (50%) and causal relations (52%) were also thought to be contributing factors to non-disclosure. However, culture and loss of financial support were thought by the majority of respondents to be less influential factors in this regard.

Based on the overall findings presented here, it is concluded that no single factor could be necessarily said to influence disclosure of HIV status to a sexual partner, but rather possibly a combination of such factors.

5.4 RECOMMENDATIONS

- The findings in this study found that pregnant women were less likely to disclose to their partner if they did not know the partner's status compared to knowing that

partner's status. Therefore it is recommended that couple counselling should be promoted to reduce the barriers to disclosure and increase the awareness of the partner's status, which remains unacceptably low.

- Fear of blame was found to be one of the reasons contributing to non-disclosure as confirmed by 65.0% of respondents. Support groups should be established in the communities. Stakeholders in the communities such as health workers, social workers and non-governmental organizations could establish such groups.
- Fifty two percent of the respondents said that non-disclosure could be due to casual sexual relationship. Therefore it is recommended that community education on HIV prevention should be improved.
- The disclosure rates in this study were 82.0% for those who disclosed to the sexual partners and 94.7% disclosed to someone other than a health provider. Thus, further study should be conducted to find out what could have contributed to the high rate of disclosure in this specific population.
- Hundred (100%) of those attending traditional religions had disclosed to their sexual partners. There is need to do more research to find out how traditional religion can possibly have a positive role to play in promoting disclosure to sexual partner.

Overall, there is need for development of practical guidelines for implementing disclosure management strategies. These could include training of health care workers and counsellors on disclosure and guidelines for continuous disclosure counselling.

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ANNEXURE 1: INFORMED CONSENT FORM (English version)

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCHUNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Disclosure of HIV positive status to sexual partners among pregnant women in a health district of Botswana

You are asked to participate in a research study conducted by Emmanuel Tshisuyi, from the African centre for HIV/AIDS management at Stellenbosch University. The results of this study will be used for academic purpose as a requirement for completion of my master in philosophy in HIV/AIDS management. You were selected as a possible participant in this study because you are a HIV positive pregnant woman and the study seeks to gain knowledge and information about whether or not you have disclosed your status to your partner.

1. **PURPOSE OF THE STUDY**

By investigating the factors influencing the disclosure of HIV positive status to sexual partners among women, it is hoped that the body of knowledge will be increased in this regard and prevention approaches can be revamped targeting HIV positive people with their sexual partner. Prevention messages can then be developed that targets sexual partners.

2. **PROCEDURES**

If you volunteer to participate in this study, we would ask you to do the following things:

Sign a written informed consent which will be collected separately from you and will not be linked to your questionnaire.

After completion of the informed consent, you will be asked about 20 questions and you will provide answers to each question. This is an anonymous questionnaire, your name will not be written on this questionnaire and no identification mark will be attached to it. You will not be subjected to any physical risk of injury, pain or trauma and every effort has been made to ensure that any emotional stress or disturbance to study respondents is minimized. The questionnaire takes about 20-30 minutes to complete and will ask your age range, gender and various questions regarding HIV status disclosure.

You do not have to answer any questions that you do not want to answer and you may discontinue the interview, at any time you may choose.

3. POTENTIAL RISKS AND DISCOMFORTS

Some discomforts may be encountered as you are asked some personal questions. If any patient gets upset during the interview, the researcher will be available to counsel such a respondent to implement further referrals should that be necessary. Please feel free to contact Dr Emmanuel Tshisuyi at work on Tel....., at home on ....., on cell number ..... or email..... You can also contact Mrs Moyo or Mrs Dingwe at..... for psychological support or you can contact your lay counselor (name) at Tel. No: ..... However this is an anonymous questionnaire and the information entered will not be traced to you.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

There is no direct benefit of this research study to you as an individual. However, data that is generated from this research study will increase the body of knowledge on HIV positive disclosure among sexual partners. Policy makers may learn from this study for policy formulation regarding HIV status disclosure.

5. PAYMENT FOR PARTICIPATION

You will not be paid to participate in this study

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.

Confidentiality will be maintained by the researcher and the assistant who are trained in good clinical practice and will collect data using an anonymous questionnaire. No identifiers will be used which have a risk of linking you to your questionnaire. The anonymous questionnaires will be collected separately from the consent forms to ensure that there is no linkage to the questionnaire. In reporting the results, care will be taken not to report results in a way that would enable any participants to be identified and/or stigmatized in their views. Data will be stored in a safe place at all times. The researcher and her supervisor will be the only persons having access to the data. All data collected will be destroyed after successful completion of the thesis, for the purpose of which it was collected. The anticipated period is after one (1) year.
The research process may be inspected by the Ministry of Health of Botswana's Ethics Committee or the University of Stellenbosch Ethics Committee. The research report will be submitted to Ministry of Health, University of Stellenbosch as well as the District Health Management Team but none of the information can be traced to you.

The purpose of the study is for the completion of an MPhil degree in HIV and AIDS Management and due to the requirement of the publishing of a thesis, the data collected, analysed and interpreted in this study will be reported on. In the writing of the thesis, confidentiality, anonymity, and privacy of participants will be maintained at all times

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Dr Emmanuel Tshisuyi at work on ....., at home on ....., on cell number ..... or email.....You can also contact Mrs Moyo or Mrs Dingwe at .....for psychological support, or you can contact your lay counselor (name) at (Tel. No:.....). You can also contact the supervisor of my study, Mr Burt Davis at .....or .....

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to [*me/the subject/the participant]* by [*name of relevant person]* in [*English/Setswana]* and [*I am/the subject is/the participant is]* in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject]* was given the opportunity to ask questions and these questions were answered to *[my/his/her]* satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

_____

Name of Subject/Participant

_____

Name of Legal Representative (if applicable)

_____ _____

Signature of Subject/Participant or Legal Representative **Date**

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant]* and/or [his/her] representative _____ [*name of the representative]. [H*e/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [*English/Setswana*] and [*no translator was used/this conversation was translated into* _____ by _____].

_____ _____

Signature of Investigator Date

ANNEXURE 2: INFORMED CONSENT FORM (Setswana version)

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCHUNIVERSITY
TUMALANO YA GO TSAYA KAROLO MO DIPATLISISONG

Kamogano ya maduo a mogare wa HIV mo go bomme ba baimana le bakapelo ba bone mo kgaolong ya botsogo mo Botswana

O kopiwa go tsaya karolo mo dipatlisisong tse di dirwang ke Emmanuel Tshisuyi, go tswa kwa sekolong sa Stellenbosch University mo lekalaneng le le itebagantseng le bolwetse jwa HIV/AIDS. Maduo a dipatlisiso tse a tla dirisiwa ebile a tlhokafala gore ke kgone go fetsa dithuto tsa me tsa ”Masters in Philosophy” mo go itebaganyeng le bolwetse jwa HIV/AIDS. O tlhophilwe go tsaya karolo mo dipatlisisong tse ka gore o le moimana o tsilang ka mogare wa HIV, gape go tlhe go tlhalosege gore a o amogane seemo sag ago sa mogare wa HIV le mokapelo wa gago ga mmogo le dikgang tse dingwe tse di maleba.

1. **MAIKAELELO A DIPATLISISO**

Ka go sekaseka mabaka a a amang go amogana ga maduo a mogare wa HIV le bakapelo mo go bomme, tsholofelo ke gore se, se tla oketsa kitso gammogo le go tokafatsa ditsela tsa itshireletso mo bathong ba ba tshelang ka mogare le bakapelo ba bone. Se, se tla thusa go tlhama melaetsa e e maleba ya itshireletso go itebaganya le bakapelo.

2. **TSAMAISO**

Fa o dumela go tsenelela dipatlisiso tse, re tla go kopa go dira tse di latelang:

Go saena/baya monwana tumalano ya go tsaya karolo mo dipatlisisong, e e tla tsewang mo go wena mme ga e pataganngwe le pampiri ya gago ya potsolotso.

Morago ga go tlatsa pampiri ya tumalano ya go tsenelela dipatlisiso tse, o tla kopiwa go araba dipotso di le masome a mabedi tsotlhe. Potsolotso e ga e senole gore o mang, (e sephiri), ga e kwalwe maina a gago kana sesupo sepe sa gago mo go yone. Ga o tle go utwisiwa botlhoko, kana go gobadiwa ka tsela epe mo patlisisong e, ebile go lekilwe ka bojotlhe go fokotsa sepe se se ka tshwenyang maikutlo. Potsolotso e tsaya metsotso e e masome a mabedi(20) go ya ko go e e masome a mararo(30), mme re tla go botsa dingwaga, bong le dipotso tse di farologanyeng mabapi le go amogana seemo sa gago sa mogare wa HIV.

3. KGONAFALO YA DIPHATSA LE GO TSHWENYEGA

Go ka nna le go tshweyega jaaka o botswa dipotso tse di tseneletseng. Fa motsayakarolo a ka tshwennyegwa ke sepe fela potsolotso e tsweletse, mmatlisisi o tla a bo a le teng go mo sidila maikutlo le go mo romela go thusiwa go ya pele, fa go tlhokafala. O gololesegile go ka ikgolaganya le Dr Emmanuel Tshisuyi mo mogaleng wa tiro: ....., mogala wa lotheka: ..... kana email: ..... O ka ikgolaganya le Mma Moyo kana Mma Dingwe mo ..... ka go sidila maikutlo, kana oka ikgolanganya le mo lay kansalara mo (Tel. No.....)

Mme fela, potsololotso e, e sephiri ebile dikarabo tse di kwalwang mo go yone ga go supiwe gore ke tsa ga mang.

4. DIPOELO TSA BATSAYA KAROLO/LE SECHABA

Ga go na dipoelo dipe tse o di bonang o le motsaya karolo. Mme, maduo a a tla tswang mo dipatlisisong tse, a tla thusa go oketsa kitso ka ga go amogana seemo sa mogare wa HIV mo bakapelong. Se, se tla thusa le badiri ba mananeo le ditsamaiso go tlhama mananeo le tsamaiso e e maleba mabapi le go amogana seemo sa mogare wa HIV.

5. TUELO YA GO TSAYA KAROLO

Ga o na go duelelwa go tsaya karolo mo dipatlisisong tse.

6. TSHOMARELO YA DIKGANG TSA MOTSAYA KAROLO

Dikgang dipe fela tse di lomaganngwang le wena o le motsaya karolo tse di tla tswang mo dipatlisisong tse, di babalesegile ebile ga di ntshediwe ntle ka gope.Di ka ntshediwa ntle ka tetla ya gago kana e le taolo ya molao. Tshomarelo ya dikgang tse e tla diragatswa ke mmatlisisi le mothusi wa gagwe ba ba rutetsweng tsa botsogo mme ba tla dirisa potsolotso e e sephiri. Ga go na sepe se se tla dirisiwang mo potsolotsong ya gago se se ka go go golaganyang le wena. Dipotsolotso tse di sephiri tse ga di pataganngwe le tumalano ya go tsenelela dipatlisiso go itsa gore go nne le tomagano ya potsolotso ya gago le tumalano e o e beileng monwana/ saenneng. Fa maduo a begwa, go tla elwa tlhoko gore maduo ga a senole batsaya karolo kana ba sa tsewe sentle go ya ka maikutlo a bone mo potsolotsong. Dikgang tsa patlisiso e di tla bewa di babalesegile ka nako tsotlhe. Mmatlisisi le mothusi wa gagwe ke bone ba nang le tetla ya tiriso ya dikgang tsa patlisiso e. dikgang tsotlhe le mekwalo yotlhe ya dipatlisiso tse e a senngwa morago ga tiriso e e feletseng ebile e atlegileng ya dithuto le patlisiso mo lebakeng la morago ga ngwaga. Tsamaiso ya dipatlisiso e ka nna ya kanokiwa ke ba dikomiti tsa tsamaiso le melawana ya lephata la botsogo mo Botswana le ya Stellenbosch University.Pego ya dipatlisiso tse e tla rolelwa lephata la botsogo la Botswana, Unibesithi ya Stellenbosch le lephata la botsogo mo kgaolong, mme pego e ga e kake ya golaganngwa le wena.

Maikaelelo a patlisiso e ke go wetsa dithuto tsa ‘MPhil in HIV and AIDS Management’.Go ntsha lokwalo kgatiso la dipatlisiso go tlhokana le gore dikgang tse di kgobokantsweng, di kanokilwe ebile di gatisitswe mo patlisisong di begwe. Mo go kwaleng lokwalo kgatiso la patlisiso e, tshomarelo ya dikgang le sephiri sa batsaya karolo e tla tlhomamisiwa ka nako tsotlhe.

7. GO TSAYA KAROLO LE GO TSWA MO PATLISISONG

O ka tlhopha go tsenelela patlisiso kana nnyaa. Fa o ithaopetse go tsenelela patlisiso e,o ka ikgogela ntle nako nngwe le nngwe ko ntle ga ditlamorago dipe. O ka se arabe dipotso dipe tse o sa batleng go di araba mme o tswelele le patlisiso.mmatlisisi o ka go ntsha mo dipatlisisong tse fa go na le mabaka a a letlang seo.

8. GO IKGOLAGANYA LE BA BATLISISI

Fa o na le dikakgelo kana dipotso dingwe ka ga dipatlisiso tse, o gololesegile go ka ikgolaganya le Dr Emmanuel Tshisuyi mo mogaleng wa tiro: ....., mogala wa

lotheka: ..... kana email: ..... O ka ikgolaganya le Mma Moyo kana Mma Dingwe mo ..... gore a go sidila maikutlo, kana oka ikgolanganya le mo lay kansalara (Name) mo (Tel. No.....). O ka ikgolaganya le mookamedi wa dipatlisiso tsa me, Mr Burt Davis mo .....kana .....

DITSHWANELO TSA BATSAYA KAROLO

O gololesegile go emisa tetla ya gago ya potsolotso nako nngwe le nngwe le go tswa mo go tseeng karolo ko ntle ga kotlhao epe. O tla bo o sa tlole molao ope ka go tsenelela dipatlisiso tse. Fa o na le dipotso dipe ka ga ditshwanelo tsa gago o le motsaya karolo mo patlisisong e, ikgolaganye le Ms Malene Fouche [mfouche@sun.ac.za; 021 808 4622] mo lekalaneng la tsa dipatlisiso.

TSHAENO YA MOTSAYA KAROLO KANA MOEMEDI WA MOLAO

Se se fa godimo se tlhaloseditswe nna _____ ke _____ mo puong ya [sekgoa/Setswana] mme ke tlhaloganya puo e, kana ke tolokololetswe mo go kgotsofatsang. Ke neetswe sebaka sa go botsa dipotso mme di ne tsa arabiwa mo go kgotsofatsang.

[Ka jalo ke dumalana go tsenelela dipatlisiso tse/ke dumalana gore motsaya karolo a tsenelele dipatlisiso tse]. Ke neetswe moriti wa mokwalo o.

_____Leina la motsaya karolo

_____

Leina la moemedi wa molao (fa a le teng)

_____ _____

Monwana wa motsaya karolo/Moemedi wa molao **Letsatsi**

TSHAENO YA MMATLISISI

Ke bolela fa ke tlhaloseditse _____ mokwalo o, gammogo le moemedi wa gagwe _____.O neetswe sebaka se se lekaneng go mpotsa dipotso dipe. Puisano e, e ne e le mo puong ya *[Sekgoa/Setswana]* mme *[ga go a nna le motolokolodi/puisano e ne ya tolokololelwa mo puong ya _____ ke _____]*

_____ _____

Monwana wa mmatlisisi Letsatsi

ANNEXURE 3: REC APPROVAL LETTER (Stellenbosch University)

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Approval Notice
Response to Modifications- (New Application)

07-Oct-2013
Tshisuyi, Emmanuel ET

Proposal #: HS988/2013

Title: **DISCLOSURE OF HIV POSITIVE STATUS TO SEXUAL PARTNERS AMONG PREGNANT WOMEN IN A HEALTH DISTRICT OF BOTSWANA**

Dear Dr Emmanuel Tshisuyi,

Your **Response to Modifications** - ***(New Application)*** received on **26-Sep-2013**, was reviewed by members of the **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on **04-Oct-2013** and was approved.
Please note the following information about your approved research proposal:

Proposal Approval Period: **04-Oct-2013 -03-Oct-2014**

Please take note of the general Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

Please remember to use your **proposal number** (**HS988/2013**) on any documents or correspondence with the REC concerning your research proposal.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

Also note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required. The Committee will then consider the continuation of the project for a further year (if necessary).

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki and the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) registration number REC-050411-032.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 0218839027.

Included Documents:
Revised REC Application
REC Application
Research proposal
REC letter
Letter to REC (2)
Questionnaires
DESC form
REC letter (2)
Final consent forms
Revised informed consent form
Revised DESC form
Informed consent form

Sincerely,

Susara Oberholzer

ANNEXURE 4: PERMISSION LETTER TO THE MINISTRY TO CONDUCT THE RESEARCH

Department of Economics and management sciences

University of Stellenbosch

P.O. Box

StellenBosch

South Africa

13/05/2013

The Chairman

Research and Ethics Committee

Health Research Unit

Ministry of Health

Gaborone

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT RESEARCH KGATLENG HEALTH DISTRICT CLINICS

I request permission to conduct research in Kgatleng health district. This research is part of the requirements for the award of Master of Philosophy in HIV/AIDS management degree at the University of Stellenbosch. My student number is 16326873.

The research will comprise a cross-sectional descriptive study aimed at identifying factors contributing to disclosure of HIV positive status to sexual partners in PMTCT

mothers in Kgatleng district. The time table and other details about the proposed research are contained in the accompanying research protocol.

I will gladly provide any other information or clarifications you may require concerning this proposal.

Yours faithfully,

Dr Emmanuel T. Tshisuyi

Senior medical officer

DRMH (Mochudi)

ANNEXURE 5: PERMISSION LETTER FROM REC (MOH)

TELEPHONE: 368 2766
FAX: 391 0647
TELEGRAMS: RABONGAKA
TELEX: 2818 CARE BD

Republic of Botswana

MINISTRY OF HEALTH
PRIVATE BAG 0038
GABORONE

REFERENCE NO: PPME 13/18/1 PS V (260) 4 November 2013

Health Research and Development Division

Notification of IRB Review: New application

Emmanuel Tshibanda Tshisuyi
P.O. Box 24
Mochudi

Protocol Title:	**DISCLOSURE OF HIV POSITIVE STATUS TO SEXUAL PARTNERS AMONG PREGNANT WOMEN IN A HEALTH DISTGRICT OF BOTSWANA**
HRU Approval Date:	30 October 2013
HRU Expiration Date:	30 October 2014
HRU Review Type:	HRU reviewed
HRU Review Determination:	Approved
Risk Determination:	Minimal risk

Dear Mr Tshisuyi

Thank you for submitting new application for the above referenced protocol. The permission is granted to conduct the study.

This permit does not however give you authority to collect data from the selected sites without prior approval from the management. Consent from the identified individuals should be obtained at all times.

The research should be conducted as outlined in the approved proposal. Any changes to the approved proposal must be submitted to the Health Research and Development Division in the Ministry of Health for consideration and approval.

Furthermore, you are requested to submit at least one hardcopy and an electronic copy of the report to the Health Research, Ministry of Health within 3 months of completion of the study. Approval is for academic fulfillment only. Copies should also be submitted to all other relevant authorities.

1

Continuing Review
In order to continue work on this study (including data analysis) beyond the expiry date, submit a Continuing Review Form for Approval at least three (3) months prior to the protocol's expiration date. The Continuing Review Form can be obtained from the Health Research Division Office (HRDD), Office No. 9A 11 or Ministry of Health website: www.moh.gov.bw or can be requested via e-mail from Mr. Kgomotso Motlhanka, e-mail address: kgmmotlhanka@gov.bw As a courtesy, the HRDD will send you a reminder email about eight (8) weeks before the lapse date, but failure to receive it does not affect your responsibility to submit a timely Continuing Report form

Amendments
During the approval period, if you propose any change to the protocol such as its funding source, recruiting materials, or consent documents, you must seek HRDC approval before implementing it. Please summarize the proposed change and the rationale for it in the amendment form available from the Health Research Division Office (HRDD), Office No. 7A 7 or Ministry of Health website: www.moh.gov.bw or can be requested via e- mail from Mr. Kgomotso Motlhanka, e-mail address: kgmotlhanka@gov.bw . In addition submit three copies of an updated version of your original protocol application showing all proposed changes in bold or "track changes".

Reporting
Other events which must be reported promptly in writing to the HRDC include:
- Suspension or termination of the protocol by you or the grantor
- Unexpected problems involving risk to subjects or others
- Adverse events, including unanticipated or anticipated but severe physical harm to subjects.

If you have any questions please do not hesitate to contact Mr. P. Khulumani at pkhulumani@gov.bw, Tel +267-3914467 or Lemphi Moremi at lamoremi@gov.bw or Tel: +267-3632754. Thank you for your cooperation and your commitment to the protection of human subjects in research.

Yours sincerely

P. Khulumani
For Permanent Secretary

MINISTRY OF HEALTH
RESEARCH DIVISION
2013 -11- 04
P/BAG 0038
GABORONE
REPUBLIC OF BOTSWANA

ANNEXURE 6: **PERMISSION LETTER TO THE DHMT TO CONDUCT RESEARCH**

Department of Economics and Management Sciences

University of Stellenbosch

P.O. Box

Stellenbosch

South Africa

13/05/2013

TO: The Head

Kgatleng Health District Management

P.O.BOX: 24

Mochudi

Botswana

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH

I am a medical officer at Deborah Retief Memorial Hospital (DRMH). I am a registered Master of Philosophy in HIV/AIDS management student at the University of Stellenbosch.

I wish to apply for permission to carry out a study on factors contributing to disclosure of HIV positive status to sexual partners in PMTCT mothers in Kgatleng district. This is part of the requirements for completion of my Master of philosophy degree in HIV/AIDS management.

To contribute to the existing body of the knowledge about HIV status disclosure among adults in Botswana and to ensure the highest quality care of patients, there is need to learn about the factors contributing one's HIV status disclosure.

Furthermore the findings of the study will be disseminated to all stakeholders in health so that the data informs the development of policies, programmes and practices to improve the quality of care given to HIV/AIDS patients.

I shall be very pleased if you can grant me the permission to carry out the study. Should you have any queries, please do not hesitate to contact me or my supervisor on the contact details provided below.

Yours faithfully,

Emmanuel T.Tshisuyi. (Researcher: 00267 71411012)

ANNEEXURE 7: PERMISSION LETTER FROM THE DHMT

Telephone: (267) 5777837
FAX (267) 5777346

KGATLENG DHMT
PRIVATE BAG 13 MOCHUDI

REPUBLIC OF BOTSWANA

REF:KGDHMTI/VI(3) **21 November 2013**

TO: Dr Emmanuel T.Tshisuyi
DRM Hospital.

RE: Permission to conduct research on "factors contributing to disclosure of HIV positive status to sexual partners among pregnant women in Kgatleng district".

Reference is made to your request to conduct research on the above stated research topic and your attached document related to the permission granted to conduct the research from research and development division of MOH dated 18th November/2013, REF No PPME 13/18/I PS Vol (260) .as part of the fulfillment of your academic requirement.

It is my pleasure to inform you that, you are hereby granted permission to conduct the stated research provided that appropriate consent is obtained from the participants. The district specific findings and recommendations obtained from the research result is expected to be shared with the district. By copy of this letter the PHC Nursing superintendant,catchment area supervisors and Nurse in charges of the selected facilities are informed to assist you in facilitation of your study.

Faithfully yours

S. Tegegne
KGATLENG DHMT HEAD

C/c PHC Nursing superintendent
- Catchment area supervisors
Nurse in-Charges of
-Mochudi Clinic 1
- Phaphane clinic
- Oodi Clinic
-Artesia clinic
- Modipane Health post
- Makakatlela clinic
- Mathubudukwane clinic

ANNEXURE 8: DATA COLLECTION INSTRUMENT: STRUCTURED INTERVIEW SCHEDULE (English version)

DISCLOSURE OF HIV POSITIVE STATUS TO SEXUAL PARTNERS AMONG PREGNANT WOMEN IN A HEALTH DISTRICT OF BOTSWANA

Date……..

SECTION A: DEMOGRAPHIC INFORMATION

1. Age in years:

18-20	
21-25	
26-30	
31-35	
35 +	

2. Marital status:

Never Married	
Married	
Co-habiting	
Divorced /Separated	
Widowed	

3. Educational level completed:

None	
Primary	
Secondary	
Tertiary (please specify)	

4. Employment status:

Employed	
Unemployed	
Self-employed (please specify)	
Volunteer	
Student	

5. How much do you earn per month (in Pula)?

No income	
0-999	
1000-1999	
2000-2999	
3000 and more	

6. Religion

None	
Christianity	
Islam	
Traditional	
Hindu	
Buddhism	

Other religion: please specify:.....

SECTION B: DISCLOSURE ISSUES

1. When did you learn about your HIV diagnosis?

This week	
2 weeks	
a month	
three months	
six months	
one year	
More than a year	

2. Have you disclosed your HIV status to anyone, excluding health care professionals?

Yes	
No	

3. How many people have you told about your HIV positive status?

1	
2	
3	
4	
5 or more	

4. Who did you tell about your status?

Friend	
Family member	

Work colleague	
Religious leader	
Spouse	
Boy friend	
Casual sex partner	
Neighbour	
Others (please specify)	

5. After how long did you disclose your HIV status after diagnosis?

Same day	
In less than a week	
After a week	
More than a month	
More than Three months	
More than six month	
More than a year	
Never	

6. Have you disclosed your HIV status to your sexual partner?

Yes	
No	

7. How long did you take to disclose your HIV status to your sexual partner after diagnosis?

Same day	
In less than a week	
After a week	

More than a month	
More than Three months	
More than six month	
More than a year	
Never	

8. What do you think prevents people from disclosing? Please mark with a tick.

Fear of blame:

Yes	
No	

Because it is not accepted in your culture:

Yes	
No	

Due to fear of rejection:

Yes	
No	

Loss of financial support:

Yes	
No	

Due to fear of abuse:

Yes	
No	

It is a casual relation

Yes	
No	

Other reasons. Please comment.

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……
……
……
……
……

9. What do you think may have helped you to disclose? Please comment.

……
……
……
……
……

10. Do you have any suggestions or recommendations for helping and supporting people to disclose their HIV positive status? Please comment.

……
……
……
……
……

SECTION C: SOCIAL INFORMATION

1. Do you drink alcohol?

Never	
Occasionally	
Regularly	

2. How many sexual partners do you have at the moment?

None	
One	
Two	
Multiple	

3. How long are you together with your current sexual partner(s)?

< 3 months	
< 6months	
< 1 year	
< 5 years	
> 5 years	

4. What is the HIV status of your partner?

Positive	
Negative	
I do not know	

Thank you for participating in the study.

ANNEXURE 9: DATA COLLECTION INSTRUMENT: STRUCTURED INTERVIEW SCHEDULE (Setswana version)

KAMOGANO YA SEEMO SA MOGARE WA HIV LE BAKAPELO MO BAIMANENG MOKGAOLONG NNGWE YA BOTSOGO MO BOTSWANA

Letsatsi:.....

KAROLO A: DINTLHA KGOLO

1. Dingwaga:

21 - 25	
26 – 30	
31 – 35	
35+	

2. Seemo sa gago sa nyalo:

Ga ke a nyalwa / nyala	
Ke nyetswe / nyetse	
Ke nna le molekane wame mme ga re a nyalana	
Ke tlhadile / tlhadilwe / re kgaogane lobakanyana	
Ke motlholagadi/ Moswagadi	

3. O badile bokae ko sekolong? (Tshwaya e le nngwe)

Ga ke a tsena sekolo	
Ke badile lekwalo le le botlana la bosupa (1-7)	
Ke badile lekwalo la dithuto tse dikgolwane (form 1-5)	
Ke badile lekwalo la dithuto tse dikgolwane tsa bodiredi kgotsa tsa tiro ya diatla (University/ College /Technikon)	

4. Tsa khiro:

Ke a bereka	
Ga ke bereke	
Ke a ipereka (tswe tswe	

tlhalosa)	
Ke Moithaopi	
Ke Moithuti	

5. Ke sekale sefe se se tsamaelanang le dituelo tsa gago tsa kgwedi? (ka madi a Pula)

Ge ke amogele sepe	
0 - 999	
1000 – 1999	
2000 – 2999	
3000 – le gofeta	

6. Tsa kereke/tumelo

Epe	
Se-Keresete	
Se-Islam	
Tumelo ya setso	
Se-Hindu	
Se-Buddhism	

Tse dingwe; tswee- tswee tlhalosa:.....

KAROLO B: TSA KAMOGANO YA SEEMO SA BOTSOGO

1. O itsile leng ka seemo sa gago sa mogare?

Mo bekeng yone e	
Beke tse pedi	
Kgwedi	
Kgwedi tse tharo	
Kgwedi tse thataro	
Ngwaga	
Go feta ngwaga	

2. A go na le mongwe yo o mo itsisitseng ka seemo sa gago sa mogare ko ntle ga badiri ba botsogo

Ee	
Nyaaa	

3. O boleletse batho ba ba le kae ka seemo tsa gago tsa mogare wa HIV

1	
2	
3	
4	
5 kana go feta	

4. O boleletse mang ka seemo sa gago ?

Tsala	
Losika	
Mmereki ka nna	
Moeteledipele mo tumelong	
Monna/Mosadi	
Mokapelo	
Mokapelo wa nakwana	
Moagisanyi	
Ba bangwe (tlhalosa)	

5. O boleletse batho seemo sa gago sa mogare wa HIV morago ga lebaka le le kae o sena go fiwa maduo ?

Letsatsi lone leo	
Mo bekeng yone eo	
Morago ga beke	
Go feta kgwedi	
Go feta kgwedi tse tharo	

Go feta kgwedi tse thataro	
Go feta ngwaga	

6. A o itsisitse mokapelo wa gago ka seemo sa gago sa mogare wa HIV?

Ee	
Nnyaa	

7. O tsere lebaka le le kae go amogana seemo sa gago sa mogare wa HIV le mokapelo wa gago?

Letsatsi lone leo	
Mo bekeng yone eo	
Morago ga beke	
Go feta kgwedi	
Go feta kgwedi tse tharo	
Go feta kgwedi tse thataro	
Go feta ngwaga	

8. O akanya gore ke eng se se go kganelang go amogana maduo le mokapelo? Tswee-tswee supa karabo ka letshwao.

Poifo ya go tshwaiwa phoso:

Ee	
Nnyaa	

Ga go amogelesege mo ngwaong ya me:

Ee	
Nnyaa	

Poifo ya go kgaphelwa ntle

Ee	
Nnyaa	

Go latlhegelwa ke tlhokomelo/go tlamelwa ka tsa madi:

Ee	
Nnyaa	

Poifo ya go sotlwa? Go bogisiwa:

Ee	
Nyaa	

Ke botsalano jwa nakwana:

Ee	
Nyaa	

Mabaka a mangwe.Tswee-tswee akgela.

……
……
.....
.....

9. O akanya gore wena o thusitswe ke eng go amogana seemo sa gago? Tswee-tswee akgela

……
……
……
.....
……

10. A o na le megopolo kana dikakanyo tse di ka thusang le go rotloetsa batho b aba tshelang le mogare go amogana seemo sa bone sa mogare? Tswee-tswee dira kakgelo.

……
……
……
……
……

KAROLO C: TSA SETHO

1. A o nwa bojalwa?

Gotlhelele	
Nako tse dingwe	
Nako tse dintsi	

2. O na le bakapelo ba o tlhakanelang dikobo le bone ba le kae?

Ga ke na	
A le mongwe	
Ba le babedi	
Boraro le go feta	

3. O na le lebaka le le kae le mokapelo/bakapelo ba o tlhakanelang dikobo le bone?

Ko tlase ga dikgwedi tse tharo	
Ko tlase ga dikgwedi tse thataro	
Ko tlase ga ngwaga	
Ko tlase ga dingwaga tse tlhano	
Go feta dingwaga tse tlhano	

4. Seemo sa mokapelo wag ago sa mogare se ntse jang

O na le mogare (HIV positive)	
Ga a na mogare (HIV	

negative)	
Ga ke itse	

Ke lebogela go tsaya karolo mo dipatlisisong tse!!!