Contextual Factors Influencing Unsafe Sexual Behaviours and the Spread of HIV/AIDS Amongst the Tiv People of North Central Nigeria

by

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Attestation of Authorship

I hereby declare that the work contained in this thesis is my work and that, to the best of my knowledge and belief, it contains no material previously published or submitted for qualification of any other degree or diploma at this university or any other institution of higher learning except where due reference is made. All research procedures reported in the thesis received the approval of the ACU Human Research Ethics Committee.

Signature

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Date 01/05/2016

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Abstract

Background

Unsafe sex is the second most important risk factor for disability and deaths in the poorest countries and the ninth most important in developed countries. It is one of the major sources of HIV infection, the global leading infectious killer of human beings. Globally, in 2013, there were 2.1 million new infections, 35 million adults living with HIV/AIDS, and more than 39 million people have died of HIV/AIDS related causes since the first case was identified in 1981. Currently, about 24.7 million and 3.2 million individuals are living with HIV in Africa and Nigeria respectively. Despite the fact that penetrative sex involves partners, previous research had concentrated on the individual to provide evidence of unsafe sexual behaviours and its correlates and these assumptions have been used for biomedical and behavioural change interventions at the individual level to curb the spread of HIV/AIDS; though with some degree of success, the aim to curb the spread of HIV/AIDS had fallen short of the targets due to the impact of relational and distal factors which have not previously been adequately addressed.

Methods

My study has adopted an integrated theoretical perspective and mixed methods to examine sexual behaviours at the partners' level, its distal and proximate correlates amongst the Tiv people of Central Nigeria. A sample of 1,621 (864 women; 757 men; 815 HIV seropositive; 806 HIV seronegative) respondents who participated in survey and in-depth interviews were selected from 2 clinics and 2 other locations using multi-stage and purposive sampling methods. The Generalised Linear Regression model with Cumulative Logit Link was used in analysing the quantitative data.

Findings

The study's major findings are that:

- sexual intimacy depends on sexual capacity, sexual motivation, sexual performance, HIV and sexual webs variables;
- the lesser the sexual intimacy, the more likely the unsafe sexual behaviours and verse versa;

- the extent of sexual webs HIV status will depend on the extent of the levels of sexual intimacy;
- the extent of sexual webs HIV status (positive/negative and both positive webs/ spread of HIV) depends on unsafe sexual behaviours; and finally,
- there are more multiple partnerships and both positive sexual webs in urban-Ichongu than the other locations researched; hence HIV will spread faster in urban-Ichongu than the other locations holding other factors constant.

A variety of influences on illicit sex, unsafe sexual behaviours and HIV infections at partners' level were identified: this included various meeting places like hotels, drinking joints, markets, funerals, schools, as well as Nollywood films, cultural norms, poverty; desire for procreation, and peer or group sub-culture. In addition, stalking is used by partners (both men and women) to try to prevent illicit sex and consequent HIV infection.

Conclusion

The utilisation of sexual webs model for sexual behaviour research in my study has broken the ideological boundaries in which each discipline (Psychology, Sociology, Public health, Political economy) had been conducting research on sexual behaviour. For example, the findings in my study on culture, poverty, condoms usage, the number of sexual partners, providing favours and sexual intimacy cut across disciplinary divide. The relationship between levels of sexual intimacy (relational variable) and, individual, family and distal factors observed in this study is critical for programme interventions to reduce the spread of HIV in the study area.

The impact of the research findings are significant in terms of programme interventions to change sexual behaviours for the reduction of HIV infections which, I argue, should address the specific needs of partners at different levels of sexual intimacy. The approach where uniform services are delivered to each individual rather than partners, as if all are at the same level of intimacy, will not effectively produce the desired results of minimizing the spread of HIV/AIDS.

Keywords: sexual webs model; levels of sexual intimacy; structural factors; proximate factors; sexual behaviours; HIV

Figure I. Map Showing Geographical Location of Nigeria and Research Site



Figure 1. "Nigeria occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic Coast in the south to the fringes of the Sahara

Desert in the North. The country shares boundaries with the Republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the east. Nigeria is the most populous country in Africa" with a population of 140,431,790; adapted from Nigeria Demographic and Health Survey 2013, P. XXVI http://dhsprogram.com/pubs/pdf/FR293.





Figure II. Adopted from National Agency for the Control of HIV/AIDS (NACA) 2014, Federal Republic of Nigeria; Global AIDS Nigeria GARPR STEERING COMMITTEE, p.22 w www.unaids.org/site/default/files/NGA_narrative_report_2014.

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CHAPTER ONE INTRODUCTION

1.0 Background to the Problem

Unsafe sexual intercourse is a vital risk factor for disability and death worldwide. In the developing and developed countries, it is considered the second and the ninth most important risk factor respectively (Timiun, 2012; Ezzati et al, 2002). It is one of major sources of HIV infection, the global leading infectious killer of human beings. Globally, in 2013, there were 2.1 million new infections, 35 million adults living with HIV/AIDS, and more than 39 million people have died of HIV/AIDS related causes since the first case was identified in 1981(WHO, 2014a). Currently, about 24.7 million and 3.2 million individuals are living with HIV in Africa and Nigeria respectively (NACA, 2014). The estimated number of individuals infected with sexually transmitted disease every year is about 340 million people (WHO, 2009). From the onset of HIV pandemic, scholars have been studying the predictors of unsafe sexual behaviours at the individual level using diverse perspectives and providing explanations which are reflective of their epistemology.

However, evidence from literature suggests that their findings are limited for effective programme interventions (Auerbach et al., 2011; Alebachew, 2006; Perdomo, 2009; Prestage et al., 2010). Almost the entire studies that had examined the psychosocial predictors of unsafe sexual behaviours did not include relational and other distal variables (Adaji , Warenius, Onyany & Faxelid, 2011; Alarape, Olapegba, & Chovwen, 2008; Egbochukwu & Ekanem, 2008; Hutton, McCaul, Santora, & Erbelding, 2008; Lammers, Wijnbergen, & Willerbrands, 2011; Sunmola, 2005). While some studies that examined poverty (Cunningham & Kendal, 2010; Richter et al., 2010), dysfunctional social institutions (Sharma, & Mufene, 2011; Wayomi, Fenwick, Urassa, Zaba, & Stones, 2011), symbolic meanings (Crowford, 2010; Williamson, Buston, & Sweeting, 2009), and culture (Rigillo, 2009; Smith, 2004) to explain unsafe sexual behaviours did not consider relational or other structural variables to provide a holistic explanation. A number of other studies based on demographic and health survey data, report findings that are solely hinged on frequency calculus, and not coherently linked by theoretical explanations (Adhikari, & Tamang, 2009; Prestage et al., 2010).

It is evident from the literature that scholars had paid more attention to the study of sexual behaviour at the individual level rather than partners in sexual relationship. The levels

of sexual intimacy (relational variable), and its correlates and HIV/AIDS have not previously been examined. Sexual exclusivity and casual sexual sex are two extreme ends on the continuum of sexual intimacy. However, little or nothing has been known on the levels of intimacy (keeping one, two, or casual sexual partners), its correlates and HIV risk. These limitations might be due to the lack of health behaviour models providing suitable postulates to examine how individual, family, community and relational variables nest to influence sexual behaviours at partners' level and HIV/AIDS.

As a result, previous studies lack a holistic explanation of the relationship between sexual webs (intimacy in small to larger groupings of sexual relationships) and contextual factors that are precursors to the spread of HIV/AIDS. This scenario has hindered the holistic understanding of factors influencing sexual behaviours of couples, moreover, has given rise to the proliferation of programme interventions that have limited success in preventing the continuous spread of sexually transmitted infections including HIV/AIDS. Such intervention programmes are based on biomedical and behavioural approaches at the individual level-courtesy of the previous health behaviour models that provide causal pathways between proximal causes and HIV infections.

The present study would focus squarely on the effects of contextual variables on unsafe sexual practices and the spread of HIV/AIDS among the Tiv people of central Nigeria, using an integrated theoretical perspective (the sexual webs model). The model is more insightful than the previous ones and provides suitable postulates that nest individual, family, community and relational variables for the examination of sexual behaviours of couples. It is the only unified explanatory model incorporating perspectives from public health, cognitive psychology, sociology and political economy.

The study will provide holistic understanding of the predictors of unsafe sexual behaviours suitable for evidence based programme interventions to curb the spread of HIV/AIDS in Nigeria, and perhaps some other areas with similar social and economic characteristics. It will also extend the frontiers of knowledge in terms of theoretical modelling and operationalisation of concepts for empirical data collection within the context of unsafe sexual behaviour research.

Scholars studying sexual practices have accepted that unsafe sexual behaviours constitute significant contributors to the world disease problems (Collumbien, Gerresu, & Cleland, 2004; Slaymaker, 2004). However, there are different opinions or perspectives of what can be regarded as unsafe sexual behaviours. These perspectives have defined the way scholars conduct research on sexual behaviours in Sociology, Political Economy, Cognitive Psychology and Public Health, The dominant perspectives are public health, symbolic interactionism, cognitive psychology, cultural analysis, structural functionalism, and political economy perspectives. Collectively, these perspectives have implicated covert or overt issues and proximate or distal factors influencing unsafe sexual behaviours.

In spite of the existence of these perspectives, the previous health behaviour theories and models (Bandura, 1986; Fisher and Fisher 1992; Becker and Maiman, 1975; Careal, Buve, & Awusabbo-Asare, 1997; Howard & McCabe, 1990; Prochaska & Velicer, 1997; Rogers, 1975; Sutton, 1997; Fishbein et al., 1991) lack constructs that will be used to measure the variables reflected in all the perspective of sexual behaviours. They lack postulates which would provide a holistic explanation of both proximal and distal factors influencing unsafe sexual behaviour. And almost the entire studies based on these models are limited to the extent of their postulates.

The direct consequence of the lack of an holistic understanding of factors influencing unsafe sexual behaviour is the emergence of several programme interventions resulting from findings based on biomedical and behavioural factors at the individual level. For instance, Perdomo (2009) demonstrated that the intervention to reduce HIV prevalence among female sex workers in Honduras was based on behaviour change approach. The strategies emphasised were access to information; education and communication (IEC) to enable the women avoid or reduce the risk of HIV infection. Structural factors exposing sex workers to the risk of HIV such as sexual violence, lack of economic opportunities and gender inequality were underestimated and so the intervention had serious limitations. Other examples are the interventions in Ethiopia and Bangladesh based on Behaviour Change Communication/IEC which suffered similar limitations (Alebachew, 2006; Begum, 2003).

Reflecting on the limitations of health behaviour models whose perspectives guide research on unsafe sexual behaviours, Auerbach, Wypijewska, and Brodil (1994) reported that almost all health behaviour models are found on behaviours that are anticipated and within the ability of the individuals to control, forgetting that sexual relations involves at least two individuals. It involves feelings and influenced by several factors which might be sociocultural, context, individual, and cognitive factors that may be hard to change. The influences of alcohol and drugs on sexual behaviour underscore the relevance of understanding context as it affects sexual behaviour. Similarly, Flood (2003) has reasoned that a clear knowledge of how sexuality and gender are related is required for effective provision of programme intervention amongst heterosexual male partners who practice unsafe sex. This would require social scientific models with concepts that can be used for measuring gender and sexual relationships. In a similar vein, Bauman and Berman (2005) also indicated that the negotiation for condoms usage can be affected by the status of the sexual relationships which may not be considered in theoretical modelling especially the ones that concentrate on the individuals instead of the couples.

Furthermore, Ogden (2003) conducted systematic reviews of a sample of 47 health behaviour theories and concluded when the theories are not supported in that data, the authors offer several explanations without considering that the theory might not be appropriate. In support of Ogden's assertions, Fisher and Fisher (1992), Weinstein (1993), and Noar and Zimmerman (2005) have all suggested that a number of the health behaviour theories do not show clearly the relationships that exist between the different variables. Thus, making the theories difficult to test in order to either verify or falsify them.

Another development which has garnered support among researchers, programmers and policy makers is the emphasis on long- term response to HIV/AIDS instead of the emergency approach which has predominated interventions. This change embraces a comprehensive, strategic programming with social and structural factors forming its core elements (Auerbach & Coates, 2000; Coates, Richter, & Caceres, 2008; Kurth, Celum, Baeten, Vermund, & Wasserheit, 2011). The argument is that, if social and structural factors that inhibit the individual from protecting him or herself and others from HIV infection are transformed- the individuals can change behaviour that would be of personal and community interest, be able to apply knowledge and skills he or she has acquired to protect, and support a society that will be AIDS resistant (Campbell, 2009). Similarly, Januraga, Somers, and Ward (2014) have asserted that understanding social and structural predictors of HIV infections will enhance the quality of intervention programmes. However, the development and execution of programme interventions focusing on social and structural factors have been hindered by scientific (modelling, conceptualization and operationalisation) and political factors (Auerbach, 2009, Auerbach et al., 2011).

In addition, political motives have impacted on the representation of prevalence and incidence levels of HIV infections in some countries worst hit by HIV/AIDS epidemics. A close point of reference is the situation in Zimbabwe, where both the government and the donor agencies fighting against the spread of HIV in the country have embarked on statistical manipulations of levels of HIV infections, to paint a glamourous picture of success against

the disease (O'Brien & Broom, 2011). The socio-economic and cultural context in Zimbabwe show that there are influences of a number of factors on HIV conditions, however, strategic explanations are provided in such a manner that the owner of the information, the government or donor agencies, gets accolade from within or without the country for the achievement over HIV (O'Brien & Broom, 2011). The true position of the social conditions of HIV in Zimbabwe and countries with similar political climate can only be understood by embarking on independent research utilising an integrated approach that would provide the required information.

The shift in approach to HIV/AIDS (Auerbach et al., 2011; Kurth et al., 2011; Campbell, 2009; Coates et al., 2008), observations made by Bauman and Berman (2005) as well as Flood (2003), and Auerbach et al. (1994) indicate the dearth of all the perspectives (relational and structural predictors) of sexual behaviours in the previous health behaviour models. In addition, the political climate in some countries which favour the manipulation of statistics, to give a different picture of HIV levels, from the socio-economic and cultural context, requires an independent socio-scientific research utilising an integrated approach. In this case, I would argue that there is a need for an eco-social or multi-level model that would provide robust postulates for the study of complex and contextual factors influencing sexual behaviours and patterns.

There is also the agenda to end HIV epidemic which is aimed at scaling up the provision of core interventions such as HIV testing, HIV treatment, male circumcision and prevention of mother-to-child transmission by 2020. Emphasis are to be placed on mobilising sufficient and sustainable resources to meet the needs of defined roles, responsibilities and ensure accountability in the response. There should also be accountability and transparency of funders and implementers. Other critical requirements are improvement of efficiency and effectiveness of programmes and building of evidence base approach to end HIV/AIDS (PEPFAR, 2013). This proposed study would be useful in providing information for effective programme intervention. More so that the study addresses an area of concern (sexual behaviours) that contributes 80% of new HIV infection cases in Nigeria (the study site).

The research in this doctoral thesis adopts an integrated theoretical perspective – which I refer to as 'the sexual webs model' (Timiun, 2011; 2012), providing a holistic explanation of the contextual issues surrounding unsafe sexual practices. The model is based on constructs such as "Sexual capacity, sexual motivation, sexual performance, and levels of

entanglement (intimacy) in the 'sexual groups' referred to as Sexual Webs. This model is multi-level; incorporating individual, family, community and relational variables to provide robust postulates for the examination of contextual issues influencing sexual behaviours. I contend that the sexual webs model provides a more coherent, analytical framework than other social scientific models in regards to the examination of sexual behaviours as it is the only unified explanatory model incorporating perspectives from Public Health, Cognitive Psychology, Sociology and Political Economy" (Timiun, 2012, p.122).

1.1 Research questions

Based on the study of the Tiv people of central Nigeria, the research will answer the following questions:

- (1) What are the forms or types of sexual relationships among partners within the sexual web (sexual relationships) in the study area?
- (2) What are the levels of sexual intimacy among sexual partners in the sexual webs?
- (3) What is the relationship between levels of intimacy and unsafe sexual behaviours in the sexual webs?
- (4) What is the relationship between unsafe sexual behaviours and the spread of HIV/AIDS in the study area?

1.2 General Aim

The general aim is to examine the influence of contextual factors on unsafe sexual behaviour and the spread of HIV/AIDS using an integrated theoretical perspective.

1.2.1 Specific Aims

Specifically, the study aims to:

- Identify forms or types of sexual relationships (heterosexual, bisexual, lesbian, homosexual) within the sexual webs in the study area.
- (2) Examine the levels of intimacy among sexual partners in the sexual webs.
- (3) Examine the relationship between the levels of intimacy and unsafe sexual behaviour in the sexual webs.
- (4) Examine the relationship between unsafe sexual behaviours and the spread of HIV/AIDS

- (5) Extend the frontiers of knowledge in terms of theoretical modelling and operationalisation of concepts for empirical data collection within the context of unsafe sexual behaviour researches.
- (6) Draw inferences from the data which will provide 'building blocks' for social policy formulation and programme interventions to regulate unsafe sexual behaviours, and stem the spread of HIV/AIDS

1.3 Hypotheses

There are a number of hypotheses this study will test. These are:

- The levels of intimacy among sexual partners in the sexual webs would depend on their individual, family or community factors.
- (2) The lesser the intimacy among sexual partners the more likely the unsafe sexual behaviour
- (3) The extent of the positive sexual webs in the areas would depend on the extent of the unsafe sexual behaviour in the areas.
- (4) The extent of the spread of HIV/AIDS would depend on the extent of the positive sexual webs in the areas.

1.4 Definition of Some Constructs Associated with the Integrated Theoretical Perspective (the Sexual webs model)

The concept of sexual capacity, sexual motivation, and sexual performance was used to describe sexual attributes of human beings (Kinsey et al. 1948 & 1953). The authors described sexual capacity in relation to the biological capability to have sex while sexual performance refers to the act of having sex and how it is done. The health belief model (Becker, & Maiman, 1975; Janz, & Becker, 1984; Rosenstock, 1974) and the theory of planned/reasoned behaviour (Ajzen, & Fishbein, 1980; Montano, Kaprzyk, & Taplin, 1997) perceive motivation of health behaviour as anticipated benefits that would be derived from a behaviour. If this definition is considered with regard to sexual behaviour, it would refer to anticipated benefits to be derived from engaging in sex. In this study, these concepts are defined as follows:

1.4.1 Sexual capacity: This "refers to the entire demographic, family, socioeconomic, community and global factors that influence the ability of an individual to negotiate and perform sex" (Timiun, 2012, p.122)

1.4.2 Sexual motivation: "This refers to the expected benefits or any other thing(s) that encourages individuals to engage in sex. The ways individuals intend to perform sex and obtain the expected benefits are part of motivation" (Timiun, 2012, p.122).

1.4.3 Sexual performance: It "refers to the things the individual actually does to initiate a sexual encounter, enhance sex or during sexual encounters" (Timiun, 2012)

1.4.4 Sexual webs: According to Timiun (2012, p.122) "Sexual webs refers to the different types of sexual relations (heterosexual, bisexual, homosexual, lesbian). The terms of agreement and beliefs about sex, characteristics and sexual activities amongst sexual partners may define a sexual web. The terms of agreement may be implicitly or overtly expressed which constitute rituals before or during sex (beliefs, gifts, drugs or/and alcohol use, romance or foreplay etc.). Intergenerational sexual relations; sexual relations amongst drug and/or alcohol users; sexual relations involving private and brothel sex workers; secret sexual relations involving married individuals, widows, and widowers; sexual relations involving unemployed or employed single individuals; and sexual relations amongst adolescents and youths may define different sexual webs. Instances where a sexual partner got fed up with the other's sexual debut, and recent second encounter may be indication that they belong to different sexual webs".

1.5 Justification

In spite of the achievement recorded in reducing the spread of HIV/AIDS in Sub-Saharan Africa and other parts of the world through treatment and behaviour change intervention programmes, the reported cases of HIV infections in 2009 was 2.6 million and there was 1.6 million HIV/AIDS related deaths worldwide (UNAIDS, 2010). Two years later, the incidence cases of HIV infection globally still remains as high as 2.5 million adults, out of which 1.8 million are from Sub-Saharan Africa and 300,000 from Nigeria (UNAIDS, 2012). This underscores the need to further investigate the factors influencing the spread of HIV/AIDS. In this regard, the present study will examine contextual factors influencing unsafe sexual behaviours in Nigeria, since over 80% of the incidences cases of HIV infection are from heterosexual relationships (NACA, 2012). The study will fill the gaps in knowledge on the influence of sexual intimacy and its correlates on the spread of HIV/AIDS. The findings may be used for programme interventions targeting couples rather than the individuals to halt the spread of HIV through intercourse and improve the sexual wellbeing of the individual and the public.

The dearth of health behaviour model providing suitable postulates for the examination of sexual behaviour, previous studies in Nigeria examining predictors of HIV have failed to nest distal and proximate factors to explain sexual practices (Adebowale et al., 2013; Atilola, 2010; Izugbara, 2008; Okonko, 2012; Oyediran et al., 2011; Oyefara, 2007; Sekoni et al., 2012; Ugoji, 2011). In contrast, this study introduces a novel approach to study of factors influencing the spread of HIV in Nigeria by adopting a multilevel model that nest individual, family, community and relational variables to explain sexual behaviours and the spread of HIV/AIDS among couples.

Other problems associated with sexual behaviours are annual burden of 68,000 maternal deaths resulting from complications of unsafe abortions, and 80 million unwanted pregnancies across the globe (WHO, 2004a & b); the low usage of contraception in African (23.7%), Eastern Mediterranean (42.8%) and other parts of the globe (WHO, 2010) require a broader approach to research on sexual behaviours with the focus on understanding the dynamics of context and its impact on sexual practices

Although individually oriented intervention programmes have influenced the reduction in risky sexual behaviour, their success is greatly improved when HIV prevention includes "broader structural factors that shape or restrict individual behaviour such as poverty and wealth, age, gender and power" (Coates et al., 2008). In countries of Sub-Saharan Africa for instance, studies have shown that, distal (social and structural) factors such as gender inequality (Krishnan et al., 2008) and poverty (Parkhurst, 2010) have strong influences on the spread of HIV/AIDS. Reflective of the shift from an emergency approach to a long-term response to HIV/AIDS, my research adopts a model that provides suitable postulates for the examination of distal and proximate correlates of intimacy and HIV/AIDS. It overcomes the limitations of the previous health behaviour models that provide causal pathways between proximal factors and HIV infection, which form the basis for the biomedical and behavioural change interventions at the individual level. Multi-level modelling integrates individual, family, community and relational variables to provide new insights into sexual behaviour and HIV/AIDS. It is similar to the notion of eco-social theory (Krieger, 2001).

HIV/AIDS and other sexually transmitted diseases are the outcome of sexual intercourse, however, there have not previously been social scientific model addressing sexual intimacy and its correlates to provide analytical framework for the study of sexual behaviours among couples. Hence, there are no programme interventions targeting couples' specific needs. The research reported in this thesis utilising multilevel model or an integrated

theoretical perspective approach for the examination of sexual behaviour is an attempt for such a venture.

Some scholars (Wang, Moss & Hiller, 2006) have investigated the possibility of transferring interventions in evidence-based public health in one location to another, where there is yet enough evidence. They have stated that it will be unethical to withhold action until evidence becomes available especially in epidemics such as HIV. The success of transferability and applicability of evidence-based interventions amongst men who have sex with men in China, has beckoned for such trials in other settings. The results of the present study cannot only be used for intervention projects in the study area, but also in other locations in Nigeria, and neighbouring African countries which have similar socio-economic setting with Nigeria, where strong evidence for programme interventions are lacking.

HIV/AIDS and sexually transmitted diseases constitute a huge disease burden, draining both human and material resources of many nations especially developing nations. If efforts are not renewed to stem this trend, developing countries including Nigeria will fail to meet the targets of new millennium development goals in the year 2015 and beyond. Thus making this study apt.

CHAPTER TWO REVIEW OF LITERATURE

2.1 Introduction

This chapter provides an overview of the literature on unsafe sexual behaviours (i.e. non-use of a condom while having sex with more than one regular partner, sex while under the influence of drugs or drunk etc.) and to further argue for the need to research on contextual issues influencing unsafe sexual behaviours and the spread of HIV/AIDS using an integrated theoretical perspective which I term the sexual webs model (see pp. 41- 45 and section 3.6 for explanation of this model).

This chapter begins with the background to the problem by presenting an explanation for the different perspectives of unsafe sexual behaviours. These perspectives form the basis for assessing the limitations of various health behaviour models as theoretical constructs for the examination of unsafe sexual behaviour, and the need for a more holistic model that overcomes such limitations. Furthermore, I provide a critical survey of selected programme interventions to improve safer sexual behaviour based on the propositions of the health behaviour models. The rest of the chapter has been organised thematically to reflect both the covert and overt factors influencing unsafe sexual behaviours. Finally, there are sections on the association between unsafe sexual behaviour, other sexually transmitted diseases, HIV/AIDS, unwanted pregnancies and abortions; and an overview of the effects of HIV/AIDS.

2.2 Background to the Problem

2.2.1 Selected Perspectives on Unsafe Sexual Behaviours

The perspectives of unsafe sexual behaviours held by scholars working in disciplines such as public health, cognitive psychology, sociology and political economy are reflected in their research traditions and practices. The fundamental issues underlying each perspective, and reflections in scholarly works, will be discussed, highlighting limitations and gaps in the literature.

2.2.2 Perspectives Analysed

As mentioned above, various disciplinary perspectives structure the way unsafe sex is viewed and analysed. For example, public health practitioners' generally see unsafe sex as unprotected sex that leads to unwanted pregnancies and sexually transmitted diseases including HIV/AIDS. It is assumed that risky sexual behaviour is characterized by early age or pre-marital sex, extra-marital sex, multiple partners without the use of condoms which can then lead to unwanted pregnancies and sexually transmitted diseases (Miller-Johnson et al, 2003). Safe sex, therefore, is the one that is protected and enhances the safety of participants. In order to promote the sexual health of individuals, efforts are directed towards prevention rather than treatment. In this regard, there have been massive public awareness and sex education campaigns around the world since the 1980s, informing individuals to adopt safer sex practices (see, for example, Hayes, 1987; Miller-Johnson et al, 2003).

This public health perspective is reflected in recent studies of HIV sero-prevalence rates among clinic attendees in various countries and settings (see, for instance, Okonko, Okerentugba, & Akinpelu, 2012; Mbakwen-Aniebo, Ezekoye, & Okonko, 2012; Motayo et al., 2012; Dirisu, Alli, Adegoke, & Osazuwa, 2011); multiple sexual partners (Nobelius et al., 2011; Ragnarsson et al., 2011; Fatusi & Wang, 2009); and condom usage at onset of premarital sexual intercourse (Oyediran, Feyisetan, & Akpan, 2011; Mberu, 2008). Approaches to the study of sexual behaviours utilising this perspective may work to undermine (pay less attention) the effects of gender, poverty and other structural factors on sexual behaviours.

With sociology, the symbolic interactionist perspective (Blumer, 1937) has been influential in exploring unsafe sexual practices. Briefly, the symbolic interactionism perspective perceives unsafe sex in the context of those who do not possess specialised knowledge of sex and the circumstances surrounding its occurrence. Certain acts that will be seen as unsafe can be considered to be good provided it is pleasurable. And in some cases, regular partners may feel safe to have sex without the use of any form of protection (Pyett & Warr, 1997; Williamson et al., 2009). But sex with a casual partner as in the case of sex work may be seen as dangerous and protection utilised (Pyett & Warr, 1997).

In the symbolic interactionism or interpretive perspective, safe or unsafe sex is subjective and according to the interpretation of the participants. Some examples of scholarly works reflecting this perspective are Nobelius et al. (2011); Crawford (2010); Adebiyi and Asuzu (2009); and Lifshay et al. (2009). The view expressed by the proponents of this perspective is that unsafe sexual behaviour should be construed as subjective and contextual rather than the imposition of irrationality of sexual act on the individual from the outside. In

other words, structural factors such as poverty, gender and others play less significant roles in influencing sexual behaviour than subjective factors such as love, pleasure, meanings etc.

Various 'cultural perspectives' have also been influential when researching unsafe sexual practices. Helman (2000) suggests that culture should be understood by viewing it with respect to specific times and contexts. Kleinman, Eisenberg, Good, and Boston (1978) said there are different and multiple norms for different cultures; the normal or unusual act depends on cultural beliefs. What constitutes unsafe sex, for example, depends on the norms and values of that society. Premarital sex can be viewed as sin by one particular group while another will view it as a demonstration of becoming an adult.

The culture of a society is sustained by transmission from one generation to another through the smallest unit of the society, the family and other agents. Parsons (1951) views the family as the smallest unit of social institution which is responsible for transmitting social values to its members. These values are to help the children to avoid actions that will lead to unpleasant consequences. The children are to avoid unsafe sex that will lead to unwanted pregnancies and infections such as HIV. Members of the family who engage in unsafe sex are viewed as not been properly socialised; those who are properly socialised will avoid unsafe sex and it attendant consequences.

However, socialization is affected by the conditions in the society. Parents who are very busy may not have time to teach the young adults about sex. If the schools fail to include sex education in the curriculum or provide inadequate information about sex, the young adults will not be fully prepared for the challenges of sexual life. In reality, unsafe sexual practices elude the function of the system. Parkin (1979) opined that that structural functionalism has not considered the dynamics of the modern societies where higher positions influence lower ones; where the males may have power over the females, and the older ones over the younger ones. Behaviour may also be informed by covert or overt reasons, but these factors have not been taken into analysis by structural functionalists.

Whereas interpretive or interactionist perspectives emphasize subjective meanings attached to sexual behaviour, the cultural perspective focuses on shared meanings about sexual practices amongst a group of people. Some examples of scholarly works that reflect this perspective include Mah and Maughan-Brown (2012); Mfecane (2012); Macia, Maharaj, and Gresh (2011); Jewkes and Morrell (2010); and Stephenson (2010).

Political economists have also examined unsafe sex. For instance, Dodoo (2004) has contended that poverty, wealth and gender roles are capable of determining unsafe sexual behaviour. The political economy of sexuality has viewed sex as not necessarily anchored to cultural norms, but as a commodity that can be bought and sold and consumed in an open market. Individuals are less restrained by cultural norms, family and kinship, and are free to become sex workers. Equally, individuals who decide to be sex workers are not restrained by cultural and family values. They observe capitalist subculture in sexual matters and may practice premarital and/or unsafe sex with many partners. There may also be discrimination in the range of sexual services offered. Certain sexual acts and practices are highly valued and may be privatised; "practices such as kissing, fondling or other show of affection may be excluded from other sexual services offered to clients" (Timiun, 2011, p.119; Mckenaney & Barnard, 1996; Pyett & Warr, 1999). Safe sex is thus a commodity in capitalist and patriarchal societies. Those who don't have enough income to pay for it will be denied safe sex services.

Several scholars examining sexual behaviour in Nigeria and elsewhere have subscribed to this perspective, focusing on social conditions that warrant the exchange of sex for cash or other things of value such as the impact of food insecurity and other economic conditions influencing commercial sex practices (Atilola, Akpa, & Komolafe, 2010; Azuonwu, Erhabor, & Frank-Peterside, 2011; Munoz, Adedimeji, & Alawode, 2010; Onyeneho, 2009; Oyefara, 2007; Popoola, 2013).

Cognitive psychology assumes that the guiding principle of people's behaviour rest on four elements: susceptibility, severity, benefits and barriers (Bandura, 1986). "People usually evaluate the consequences of their behaviour in terms of the costs and benefits derived. If individuals evaluate the cost of unwanted pregnancies, and sexually transmitted diseases including HIV/AIDS, to be higher than the benefits to be derived from unprotected sex, they would adopt safer sex practices and vice versa" (Timiun, 2011, p.119; Becker, & Maiman, 1975; Janz, & Becker, 1984).This perspective assumes that individuals are in control of all conditions or situations to be able to take rational decisions while ignoring structural factors (e.g. culture, poverty, gender etc.) that shape decisions and actions. Some examples of works reflecting this perspective include Egbochuku and Ekanem (2008), Alarape et al. (2008) and Izugbara (2008).

In sum, the issues emphasised in the various perspectives of unsafe sexual behaviour discussed above revolve around subjective and objective actions. They include meanings attached to sexual acts or practices by individuals, or shared among a group of people; the influence of structural factors such as poverty, gender, and patriarchy and the influence of social institutions, and cognitive factors on the sexual behaviour of individuals.

Indeed scholars of sexual behaviour have been conducting research into the different theoretical perspectives, but the dearth of health behaviour model(s) that integrate holistic insights is problematic. Thus, the limitations of the aforementioned health behaviour models and theories which have dominated research on sexual behaviour and HIV/AIDS for the past three decades to explain relational and distal (i.e. Location) factors surrounding sexual behaviours have been openly acknowledged (Auerbach, Parkhurst, & Cáceres, 2011; Bauman & Berman, 2005; Flood, 2003; Noar & Morokoff, 2001). The postulates of health behaviour models, while sometimes acknowledging, nevertheless cannot completely explain the influence of gender, poverty, culture and subjective meanings on unsafe sexual behaviours, nor can these models be used for the study of relational variables such as levels of sexual intimacy.

2.2.3 Limitations of Health Behaviour Models and Theories in the explanation of sexual behaviours

Broadly, health behaviour models can be classified into two levels of influence: Individual (or Intrapersonal) and Interpersonal. Models at the individual level include the Health Belief model, Stages of Change model (trans-theoretical model), Theory of Planned behaviour, and Precaution Adoption Process model while at the interpersonal level there is Social Cognitive theory.

There exists another set of health promotion theories that propose the prevention of HIV/AIDS through community organization and participation in HIV/AIDS reduction programmes; diffusion of information; communication; agenda setting; social learning and networks (Careal et al., 1997; Oluwale, 2005; Sweat & Denison, 1995). These health promotion theories attempt to address structural factors influencing the spread of HIV/AIDS, but without linking psycho-social factors, relational and distal variables in the examination of unsafe sexual behaviours. Consequently, there are a few studies based on these theories and less focus from policy makers and programme developers for the prevention of HIV/AIDS.
The most commonly utilised health behaviours change models are Health belief Model (Becker, & Maiman, 1975; Janz, & Becker, 1984; Rosenstock, 1974), The Theory of Reasoned Action/planed behaviour (Ajzen, & Fishbein, 1980; Montano, Kaprzyk, & Taplin, 1997;), Social Cognitive Theory (Bandura, 1986), and the Trans-theoretical model (Prochaska et al.,1994; Prochaska, & Velicer, 1997; see Glantz, Lewis, & Rima, 1997; Redding et al., 2000).

The health belief model, theory of reasoned action/planned behaviour and the transtheoretical theory, focus more on the psycho-social factors at the individual level to predict health risk behaviour; behaviour change and maintenance of safe behaviour. The theory of reasoned action/planned behaviour emphasises behavioural intention, attitude, subjective and normative action and perceived behavioural control. As it is the case with the health belief model, this theory is based on the individual's behavioural intention and the ability of the individual to be in control of his or her sexual behaviour. But it is known that power relations, gender and poverty can make individuals vulnerable and less in control of their sexual behaviour (Macia, Maharaj, & Gresh, 2011; Weiser et al., 2007), thus highlighting the limitation of this model to explain unsafe sexual behaviours where distal factors are implicated for sexual practices.

Further, the trans-theoretical model provides the stages of intentional behaviour change. It is assumed to be a process, from where change has been initiated to the point where change has occurred. This theory places more emphasis on the processes involved in changing sexual behaviours by the individual without considering issues of culture, poverty, love and gender that may interfere with the change process and render the individual helpless.

The Social Network Theory attempts to explain the spread of HIV/AIDS amongst sexual partners form the perspective of multiple concurrent sexual relationships who are in sexual networks (Hudson, 1993; Kretzschmar & Morris, 1996; Morris, & Kretzschmar, 1997). Motivated by the apparent increase in the spread of HIV in Africa, Watts & May (1992) simulated a mathematical model describing how concurrent partnerships could aid the spread of HIV/AIDS. Subsequently, similar views were expressed by other scholars who examined concurrent sexual relationships (Hudson, 1993; Kretzschmar & Morris, 1996; Morris, & Kretzschmar, 1997; Morris & Kretzschmar, 2000). The theory focuses on the relationship between sexual partners, and the influence of immediate network subculture on sexual behaviours. Social relationships are characterized by selective mixing and variations in

partnership patterns. Critical to this theory are the composition of social networks, attitude to safer sex, support for change in sexual behaviour, and whether particular individuals in the network are at risk and may endanger others. Despite the potentials of this theory to explain sexual behaviours and the spread of HIV/AIDS in multiple concurrent relationships, it has some limitations. The theory cannot be used to explain sexual behaviour in dyad or triad (monogamous, polygamous marriages) who are not in network. It does not consider broader structural factors such as poverty, gender roles and power. It is also difficult to apply where there are no clear network structure and in comparative studies where communities may have different network structures. The concepts of nodes and actors are not suitable for studies on sexual intimacy where such characteristics do not exist, thus, rendering itself unsuitable for the studies of sexual behaviours with components of sexual intimacy (see Tables E1a &b, Pp. 331 and 332, Appendix E for focus and limitations of health behaviour models and theories including Network theory).

Generally, the various health behaviour models lack postulates that would explain contextual issues surrounding unsafe sexual behaviours. They largely focus on the role and actions of individuals rather than sexual partners and/or clients to explain sexual behaviours. Sexual intercourse, or penetrative sex, is a behaviour that involves two individuals; and in complex sexual relations as in the case of multiple sexual partners, more than two individuals would share common understanding of sexual activities among themselves. In such relations, there is the interaction of the relative influences of structural factors on the individuals, including their sexual orientations, gender issues, poverty, patriarchy, masculinity and other social norms would influence sexual relations but these factors have been underestimated by proponents of the health behaviour models.

The meanings attached to sexual relations influence whether individuals might engage in protected or unprotected sex (Munoz, Adedimeji, & Alawode, 2010; Lear 1995). The individual's action in response to symbolic meaning is different from reasoned action. For example, female sex workers examined by Pyett and Warr (1999) and Jaurez & Martin (2006) associated condom usage with sex work (reasoned action), but they resented using condoms in private relationships because it will "look like another job" (symbolic meaning).

I would contend that developments in theorizing and empirical research concerning unsafe sexual practices support a strong argument for the relevance of distal, relational and interpersonal factors in the domain of sexual behaviour research (Amaro, 1995; Auerbach, 2009; Kurth, Celum, Baeten, Vermund, & Wasserheit, 2011; Noar & Morokoff, 2001; Redding et al., 1996; Rotheram-Borus, Swendeman, & Chovnick, 2009). To address the limitations in theoretical modelling requires developing a health model that would incorporate the various perspectives of unsafe sexual behaviour within its construct. The increase in the "spread of sexually transmitted diseases including HIV/AIDS in some parts of the world" (Sub-Saharan Africa, Middle East, and central Asia) despite the commitment to reduced unsafe sexual behaviours is a clear indication of the influence of structural factors (Timiun, 2012, p.120; Lifshay et al., 2009; Parker, 2001). Hence the model that will be developed and adopted in this study, the sexual webs model would seem more appropriate and useful as an explanatory model for analysing the complexities of unsafe sex and the spread of sexually transmitted diseases including HIV/AIDS

2.2.4 Limitations of Programme Interventions Based on the Health Behaviour Models to encourage Safe Sexual Behaviours

HIV/AIDS is transmitted through unprotected penetrative sex, transfusion with contaminated blood products, sharing contaminated needles when drug injecting, needle stick injuries, and an infected woman passing the virus to her foetus during pregnancy or birth, or afterwards through breastfeeding. However, HIV transmission through unprotected heterosexual intercourse is higher than all the other modes of transmission (Bongaarts, 1996). Bongaarts explains that at the beginning of the pandemic in USA, there was the urgency to slow down the rate at which HIV was spreading. Almost all the programme interventions were explicitly or implicitly based on health behaviour theories. There were a range of individual and community- based intervention programmes to create awareness and assist the individuals to develop better skills to adopt safer sexual practices (see also Friedman & O'Reilly, 1997; Diclemente, &, Wingood, 1995).

Despite the limited success of program interventions among some groups at risk, there appears to be little compliance with behaviour change initiatives among other groups. Auerbach, Wypijewska, and Brodil (1994) suggested that almost the entire health behaviour model assume that behaviours are anticipated and within the ability of the individual to control, forgetting that sex involves two individuals. It involves feelings and is influenced by several factors which might be socio-cultural, contextual, individual, and cognitive that may be difficult to change. The influences of alcohol and drugs on sexual behaviour underscore the relevance of understanding context as it affects sexual behaviour. Furthermore, some

programme interventions to change sexual risk-taking behaviours produced little or no effect, which highlights the relevance of taking note of the relationships between contexts, population; methods and theoretical background (see Branson, Ransom, Peterman, & Zaidi, 1996; James, Gilles, & Bignell, 1998).

Another example is the observation made by Begum (2003) on a behaviour change communication programme to improve safer sex practices among brothel workers in Bangladesh. She observed that the brothel sex workers had poor education and low selfesteem and were therefore unable to negotiate for safe sex. The intervention would have been more successful if information on safe sex and condoms usage had been provided through the work places and the communities. In both intervention programmes, structural factors such as gender issues and poverty, relational variables such as love and intimacy, and other contextual factors such as alcohol and drugs and exposure to erotic videos operated to upset the positive effects on sexual behaviours.

Similar scenarios have taken place in Nigeria and other parts of Africa. The first HIV/AIDS case in Nigeria was identified in 1986. Since then the sero-prevalence rate has increased from 1.8% (1991) to 4.6% (2008), and has decreased slightly to 4.1% in 2010 (National Agency for the Control of HIV/AIDS in Nigeria [NACA], 2012). The programme interventions to stem the spread of HIV/AIDS are based on the behaviour change and communication model (BCC). The aim is to enhance the availability and usage of condoms among sexual partners. However, it has been identified that the HIV infection rates in the states of Benue, Akwa Ibom, Bayelsa and Anambra are more than 8%, or twice as high as the national average (Akinjogunla, & Adogoke, 2009; NACA, 2012), indicating the limitations of BCC programme to curb the spread of HIV/AIDS in these states and other areas in Nigeria with HIV/AIDS infection rates higher than the national average.

The situation in Namibia, as reported by Fitzgerald-Husek et al. (2011), indicates that female sex workers who participated in a behaviour change communication programme had not been able to enforce consistent usage of condoms during sexual intercourse with men. Negotiations for condom usage had been dominated by male clients with an economic (and patriarchal) advantage over women. Sex using condoms has been considered to be unpleasant to men and associated with a lack of trust, infidelity and promiscuity. Hence these conditions had rendered the women helpless with no alternative other than yielding to desires of the men (Fitzgerald-Husek et al., 2011).

In Kenya, Ragnarsson et al (2011) report that gender is the main predictor of condom usage among people living with HIV/AIDS who had enrolled in a treatment and behaviour change intervention programme. Condom usage among this group is low and the women are less likely to use condoms during sexual intercourse because of their limited power to negotiate use. While in Uganda, sero-discordant partners (one HIV positive, one negative) who enrolled in a treatment and behaviour change programme practiced unsafe sexual intercourse with other partners. Additionally, gender inequality, which may manifest in coerced sex, a desire for children, lack of social support for women, painful intercourse, and men's desire for pleasurable sex have been cited as some of the main reasons for high risk sexual behaviours (Lifshay et al., 2009).

In another case in Ethiopia, Alebachew (2006) evaluated a programme intervention to reduce the prevalence of HIV amongst young female sex workers based on the behaviour change communication (BCC) strategy. Alebachew observed unsafe sexual behaviours such as concurrent sexual partnerships, premarital sex, unprotected sex and intergenerational sexual relations amongst the young people. Factors identified to influence risky sexual behaviours were peer pressure, exposure to unlicensed erotic videos, alcohol and drugs, desire for economic gains, love relationships lacking adequate romantic period for partners to learn more about each other, cultural practices empowering men sexually more than women, and lack of individual motivation and skills to practice safe sex.

Programme interventions based on behaviour and biomedical models have achieved limited success in several areas. Structural factors at work in different areas determine to a large extent the behaviour of individuals. Bunnell (1996) suggests that the temporal dimension of the measurement of perceived risk and sexual behaviours should be incorporated into the observation of issues in communities where there is reasonable awareness of HIV/AIDS. The measurement of risk should distinguish between past and present perceptions of risk as interventions must address the two in different ways. And in a situation where the HIV/AIDS epidemic is advanced, a theoretical framework which provides postulates for the observation of perception of risk and sexual behaviours that might be influenced by gender and context should be used. In this scenario, fear is a factor that can influence lay communities' sexual behaviour at different stages of HIV epidemic, because individuals can understand and make use of risk information.

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Given the empirical evidence especially proximal and distal influencing sexual behaviours, I generally concur with the view that sexual behaviours have changed over time (MacLachlan et al., 2009; Zhen et al. 2001) and in areas where HIV/AIDS is on the increase, the effects of relational, structural and other contextual factors should be examined using appropriate models (Amaro, 1995; Bunnell, 1996; Parker, 2001).

2.2.5 Changes in attitude to and factors influencing sexual behaviours in selected countries

Scholars have documented that sexual behaviours have changed in many parts of the world as a result of globalisation and other factors (Wellings et al., 2006). Attitudes to sexual behaviours have changed in response to socio-economic/structural factors including poverty, education levels, and unemployment(Stephenson, Winter, & Elfstrom, 2013; Swendeman et al., 2009; MacLachlan et al., 2009); demographic factors (age structure of population, age at marriage, migration including seasonal workers, rural- urban drift); and disruption due to war and political instability (Adebowale, Titiloye, Fagbamigbe, & Akinyemi, 2013; Azuonwu, Erhabor, & Frank-Peterside, 2011; Mufune, 2003; Zhen et al., 2001).

The availability of "pornographic images from more sexual liberal societies to the conservative ones through the internet and other means of communication has impacted greatly on the social norms of those societies" (Timiun, 2012, p.121; Cunningham & Kendall, 2010; Baumgartner, Valkenburg, & Peter, 2010; Cameron et al., 2005; Simon, & Paxton, 2004). Policies and legislation "governing health care systems and public health strategies have also wrought changes in attitudes to sex in many countries" (Timiun, 2012, p.121; Parker, Easton, & Klien, 2000). The median age at first intercourse for women is now "15 years in countries of West Africa, East Africa, Central Africa and South Asia with increased levels of premarital sex" (Timiun, 2012, p.121; Wellings et al., 2006). "Early initiation into sex is less likely to be protected against unplanned pregnancy and sexually acquired infections, and is associated with a larger number of sexual partners over the life course" (Timiun, 2012: P.121; Danjin, & Onajole, 2010; Genuis, & Genuis, 2004; Giesecke, Scalia, & Gothberg, 1992; Harrison, Cleland, Gouws, & Frohlich, 2005). Thus, the distribution of high sero-prevalence rates of HIV/AIDS in some counties or regions reflects the pattern of change in sexual behaviour.

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2.2.6 HIV/AIDS Sero-prevalence Rates in Nigeria,

Studies focusing on the sero-prevalence rates of HIV have provided information on the rates of HIV in Nigeria, other parts of Africa and internationally. Some studies have examined the sero-prevalence rate of HIV amongst medical clinic attendees in different locations in Nigeria (Akani, Ojule, opurum, & John, 2006; Akinjogunla & Adegoke, 2009; Motayo et al., 2012; Okonko, Okerentugba, & Akinpelu, 2012); blood donors (Buseri, Muhibi, & Jeremiah 2009; Dirisu, Alli, Adegoke, & Osazuwa, 2011; Okonko, Adeniji, Okerentugba, & Anugweje, 2012; Umolu, Okoror, & Orhue, 2005); and newly enrolled university students (Mbakwem-Aniebo, Ezekoye, & Okonko, 2012).

The sero-prevalence rate of HIV amongst 200 individuals, both male and female prospective blood donors at the University College Hospital, Ibadan, Nigeria was 17.5% (Okonko et al., 2012); and the rate amongst 427 prospective blood donors, including men and women, at Benin Teaching Hospital was 47.5% (Dirisu et al., 2011). Other studies have also observed that at University Teaching Hospital, Osogbo the sero-prevalence rate amongst 1,410 blood donors was 3.1%; while at Benin City the rate was 10% (Umolu et al., 2005).

Differences in the sero-prevalence rates also exist by sex and age. Two studies have observed that men had higher rates of infections than women (Dirisu et al., 2011; Umolu et al., 2005); while in Ibadan women had higher rates of infections than men (Okonko et al., 2012). By age distribution, the infection rate was highest among age groups 30-39 years in Benin Teaching Hospital; the highest rate was observed amongst 18-39 years in Ibadan, 29-38 years in Benin City and 18-47 years at Osogbo. Where- ever data are available for both men and women on HIV sero-prevalence rates, there is evidence to show that HIV infection rates are both high amongst men and women; and the age groups mostly affected are the ones between 18 and 40 years old. The limitation of these clinical studies is that they have not provided information on the correlates of HIV sero-prevalence rates beyond sex and age distributions.

In other locations in Nigeria, HIV sero-prevalence rates were observed amongst pregnant women and men attending clinical services. Akinjogunla & Adegoke (2009) reported HIV infection rate of 34.2% amongst 316 patients including men and women attending services at Uyo, Akwa Ibom State. The women had the highest infection rate of 21.5% while the age groups between 31 and 35 years were more likely to be infected than other age groups. Akinjogunla & Adegoke (2009) identified unprotected pre-marital and

extra-marital sexual intercourse as the main factors influencing rates of HIV infection. At the Association for Reproductive Family and Health Centre, Ibadan, the HIV infection rate amongst 200 patients was 9%; the women and those single had the highest rates of infections (Okonko et al., 2012).

Similarly, the HIV infection rate amongst 600 pregnant women attending antenatal care at University Clinic, Part Harcourt was 7.5%; most of the women were married and below the age of 30 years; about 67.7% were primiparous (i.e. carrying a first pregnancy), and at an advanced stage, but the majority were not aware that they were HIV positive (Akani et al., 2006). In another Nigerian state, the HIV infection rate amongst 744 individuals attending health care services at the Federal Medical Centre, Ogun State was 11.7%, with the highest infection rate of 7.8% among women (Motayo et al., 2012). As observed earlier, studies on HIV sero-prevalence rates amongst pregnant women attending clinical services in different locations in Nigeria did not provide information on factors influencing infection rates. The information available is the distribution of infection rates by age and relationship status. Another study conducted amongst 706 new students of University of Port Harcourt observed a HIV sero-prevalence rate of 15.5% (Mbakwem-Aniebo, Ezekoye, & Okonko, 2012). The authors identified low levels of condom usage amongst both males and females; high levels of unsafe sexual behaviours; poverty, low literacy levels; and culture and religious beliefs as predictors of risky sexual behaviour and HIV infections.

Furthermore, amongst 398 female sex workers in Jos, North central Nigeria who was identified as users and non-users of lime or lemon vaginal douches against infections from sexually transmitted diseases, HIV sero-prevalence rates was 48.8% amongst users of lemon or lime douches and 48.2% amongst non-users (Imade et al., 2008). Another study examined HIV sero-prevalence rate amongst 879 men who have sex with other men in Kano, Lagos and Cross Rivers States. The authors observed a wide variation in HIV sero-prevalence rates from 1.1% in Cross River to 17.4% in Lagos States (Merrigan et al., 2011). The men reported an average of 4.2 anal sex partners in the previous six months. About 24.4% in Lagos and 36% in Kano sold sex to other men; while 49.7% had sex with girlfriends and 6.5% purchased sex with female sex workers. Condom usage was only 28% in Cross River and 34.3% in Kano States among men who participated in commercial anal sex, in contrast with 23.9% in Kano and 45.8% in Lagos States among non-commercial anal sex (Merrigan et al., 2011).

The studies on HIV sero-prevalence rates in different locations in Nigeria and among blood donors; pregnant women attending antenatal services; patients attending clinical services; students; female sex workers; men having sex with men have provided evidence to suggest that: (1) the HIV infection rate is more than the 4.1% national average obtained from sentinel surveys of antenatal care attendees (NACA, 2012); (2) the infection rates have shown a generalised pattern rather than just among groups at risk; (3) there are considerable variations in the infection rates from one location to another; (4) there may be some contextual factors accounting for the differences (5) there are not enough studies on HIV sero-prevalence rates in certain areas or antenatal care coverage to provide information on the existing rates in those places. Generally, there is a need to further investigate the factors influencing the spread of HIV/AIDS in areas of high sero-prevalence rates, and also in areas of low sero-prevalence rates to ascertain the current state of the epidemic.

2.3 Factors influencing Sexual Behaviour in Nigeria, other African states and internationally

Factors influencing sexual behaviour in Nigeria, other parts of Africa and the globe can be classified broadly into structural, family and individual factors.

2.3.1 Structural factors

These are factors related to the social, economic and political organisation of a group of people, ethnic nationality or state that influences unsafe sexual behaviours. Examples of such factors are poverty occasioned by economic deprivation; gender; masculinity etc.

2.3.1.1 Poverty and Sexual behaviour

The political economy perspective of sexual behaviour stress the role played by economic deprivation to the spread of HIV through the commercialization of sex. Poverty affects sexual behaviour. Scholars have noted that poor women have lower average age at first intercourse and lower contraceptive use (Amoran & Ladi-Akinyemi, 2012; Heaton, 1996; Schoumaker, 2004).

Poor access to contraception has been considered a direct outcome of poverty. Greene and Merrick (2005) have indicated that across the globe, poorer women lack access to contraception and are more likely not to use contraception due to their husband's disapproval. The unmet need for contraception as well as husband's disapproval is greater amongst poorer women worldwide (World Bank, 2003). If payment for contraceptives is required, the very poor may not be able to afford it even if contraceptive prices are heavily subsidized (Hanson, Kumaranayake, & Thomas, 2001). Poverty is also the major cause of commercial sex business despite the associated risks (Fitzgerald-Husek et al., 2011; Pyett & Warr, 1997)

Elsewhere in Australia, Badcock et al. (2014) observed that heterosexual men and women are engaged in keeping multiple partnerships, the behaviour correlates with having low income, being in physically active occupations, living in the cities, being single, young and being bisexual. The general trend is that of an increase in multiple partnerships over the years from 2002 to 2013.

Related studies on sexual behaviours have reported that unsafe commercial sexual practices have been reported amongst vulnerable young women between the ages of 16 and 30 years in Nigeria (Onyeneho, 2009; Popoola, 2013). For instance, almost all of the young women practising commercial sex in Enugu were unemployed, with some still attending school but needing money to eat and for school requirements (Onyeneho, 2009). Onyenero reported that they relied on the physical screening of clients' genitals to ascertain the presence or absence of sexually transmitted infections. In a male dominated area such as Enugu, it would be doubtful as to whether those younger women were able to check their clients thoroughly and also bearing in mind the limitations of this type of screening to detect various STDs. In addition to the physical screening of clients, the girls also engaged in douching the vagina with salt solution and consuming hot drinks as prevention against sexually transmitted infections.

Other commercial sex workers in Ibadan (Nigeria) indicated a clear understanding of the stigma and religious implication of selling sex, nevertheless they engaged in the business hoping to make quick money before they become infected with a sexually transmitted infection (Munoz, Adedimeji, & Alawode, 2010). Clients purchasing sex from the women offered higher sums of money for unprotected sex, which was accepted by the women as a fast way of getting rich. Another reason for women to engage in unprotected sex with men they perceived as intimate friends was the desire to get married to such individuals in the future.

In other related studies in Lagos, Ondo, Osun and Ekiti States in Nigeria the women indicated that lack of food, unemployment and money were the major reasons for engaging in hawking sex (Oyefara, 2007; Popoola, 2013). They also practiced unprotected sex and had incidences of sexually transmitted diseases, unwanted pregnancies and abortion (Oyefara,

2007). Majority of sex workers did not know their HIV status because they considered it unimportant to the business. The women were not using condoms regularly with clients and had sexual intercourse after drinking alcohol. The major risks of selling sex as mentioned by women were violence against them, police harassment and stigma (Popoola, 2013).

In Taraba state, Nigeria, HIV sero-prevalence rates were reported to be between 5.2% and 7% (Oruonye, 2011), with younger women below the age of 30 years coming to market places looking for farmers who may exchange proceeds from their agricultural produce for sex. Some of the farmers stay behind at the close of the markets to drink and engage in unprotected sexual intercourse which has increased the spread of HIV/AIDS. The reservoir of widows and female orphans has made sex available at the beck and call of the men. Most often such sex is risky but because illicit sex has become a common occurrence, the participants don't express the feelings of being at risk. Problems are exacerbated because most of the farmers' reside in rural areas which are not accessible to introducing HIV prevention programmes. Poor government response to HIV issues, shortage of treatment facilities, and resources for screening and counselling services is also problematic; out of 127,167 people living with HIV in this region, only 2541 are known to be placed on antiretroviral therapy.

The phenomenon of trading sex for daily needs is evident in other parts of Africa (Stephenson, Winter, & Elfstrom, 2013; Fitzgerald-Husek et al., 2011; MacLachlan et al., 2009; Weiser et al., 2007; Hunter, 2002). A study in urban slum areas of Nairobi indicated that economic deprivation amongst women compelled them to trade sex for survival. Hence, they had a relatively early sexual debut and a higher number of sexual partners than the rural dwellers. The married women living in the slums have higher chances of engaging into concurrent multiple sexual relationships than their rural counterpart (Dodo et al., 2007).

In Uganda hunger has played a significant role in coercing women into sexual intercourse, with men keeping multiple sexual partners (MacLachlan et al., 2009). The number of meals missed were associated with coerced and survival sex. Whereas in Swaziland and Botswana, inconsistent usage of condoms with non-primary sexual partners correlated with food insufficiency; intergenerational sexual act and lack of control of sexual activities for women already in relationships, were common features(Weiser et al., 2007).

Similarly, female sex workers in northern Namibia could not enforce the usage of condoms with clients because of a lack of economic power (Fitzgerald-Husek et al., 2011).

Hunter (2002) described the role of gifts in sexual relationships in rural and urban areas of Kwa-Zulu Natal, South Africa; subsistence and conspicuous consumption were the main motives for exchanging sex for gifts in rural and urban areas respectively. The women who had multiple sexual partners collected gifts from them in order to pay bills including accommodation, clothing, food and maintenance of cell phones. Sex without protection was common, for it was construed as 'faithfulness' to a sexual partner. Though intergenerational (young woman/old man or the 'sugar daddy' phenomenon) sexual relations were common, many did nothing or subtly encouraged it because the gift sometimes augmented the family income.

Another study in South Africa by Richter et al. (2010) reports that the criminalisation of sex work in a country where most women are unemployed and economically deprived predisposes those engaged in sex work to HIV infection. The patriarchal context in which the sex workers operate, combined with stigmatisation, marginalisation, limited access to health care, difficulties with negotiating safer sex, and gender-based violence facilitates the spread of HIV amongst this vulnerable group. Decriminalisation of sex work and the institution of a legal framework for guaranteeing accessibility to health care would be helpful.

Cut-throat competition amongst female sex workers in Bali, Indonesia for clients and economic gains exposed them to unsafe sexual practices and higher chances of HIV infections (Januraga, Somers, & Ward, 2014). In North America, a study has identified well organised commercial sex among clients through the usage of internet facilities (Cunningham, & Kendall, 2010). The authors examined two data sets: one with 94,000 sex workers and the other with 685 sex workers. Internet facilitated sex work, essentially advertising for commercial sexual encounters, was observed to involve a high number of well-educated sex workers who operate on part time basis and hold health insurance.

Overall, the perspectives summarised in this section see sexual behaviours through a material framework emphasising poverty, gender inequality and the like. Meanings attached to types of sexual relationships and the roles of social institutions such as the family in regulating sexual behaviour, are underestimated. Culture sometimes influences individuals' sexual behaviours but the political economy perspective of sexuality perceives individuals as acting independently of their cultural orientation, in response to economic pressures. The culture of a group of people is an important factor in examining unsafe sexual behaviour.

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2.3.1.2 The Influence of culture on sexual behaviour

Studies of sexual behaviours using a cultural perspective focus on shared norms with regards to sexual activities amongst a group or groups of people. These may be practices regarding sexual debut, number of sexual partners, beliefs or rules held by the group. For instance, Mufune (2003) has argued that the erosion of traditional practices (ewilo, efundula) and taboos regarding sex in Northern Namibia predispose individuals to the risk of HIV/AIDS. Traditional practices and taboos taught people how to be responsible in sexual matters and the sense that they should observe community norms with regard to sexual matters; both colonialism and Christianity have empowered men sexually more than women. Sex, hitherto held sacred, has been commercialised in certain contexts for the acquisition of material wealth.

Gender is central to culture; gender identities are socially and culturally constructed through the process of learning, praising and sometimes punishment (Weeks, Holland, & Waites, 2003). Gender inequalities tend to support men over women; the social and cultural construction of male domination, and female subordination, requires women to uphold the exercise of male power. Religions, Christianity and Islam, for instance, are powerful reinforcers of gender hierarchies. Consequently, it is very difficult for women to protect themselves from unsafe or unprotected sex in heterosexual relations when their body is used as site for the expression of power by men (Holland, Ramazanoglu, Sharpe, & Thomas, 2003).

Patriarchal socialisation is the transferring, transmitting and internalisation of femininity and masculinity from generation to generation (Philaretou, 2001). It forestalls the confusion that might arise between male and female in terms of their behaviour and rights. Under patriarchal socialisation, women are expected to show less understanding about sex to earn approval from the men, and acknowledgement that they are not being sexually 'wayward'. This means that women typically acquire less negotiating power and hence cannot argue with men over the usage of condoms, if they do, men will consider them as sexually experienced and resent them (Macia, Maharaj, & Gresh, 2011; Machel, 2001; Gagnon and Parker, 1995).

Traditional male hegemony ensures that men have the final say in all issues in the family. The man has to provide for the family and for some economic reasons, both the men and women engage in sexual networks. Whereas men in some societies may demonstrate the

construction of a masculine identity through the 'collection' of serial sexual partners, women maintain sexual networks as a strategy to cope with daily social and economic problems. The men in Mozambique, for example, justify their tendency to having frequent sexual encounters by saying that the women outnumber men so it normal for the men to have several sexual relationships (Macia, Maharaj, & Gresh, 2011)

In Uganda, masculine identities are entrenched in respect and reputation which are as the result of the acknowledgment given to the man as head of the family by the wider society and by the men folk based on his personal achievements (Siu, Wight & Seeley, 2014). Bearing children and raising them constitutes one of the shared responsibilities of men. With HIV infection amongst some men, their masculinity was deflated. However, hope was resuscitated through the intake of antiretroviral therapy which enabled some men to regain their respect through undertaking the valued responsibility of fathering children. Such venture would put some of their partners at risk especially those who are HIV negative status.

Gender roles in South Africa generally constrain women, making them dependent on men for their social and economic needs (Mah & Maughan-Brown, 2012; Jewkes, & Morrell, 2010). The need for food, clothing, train tickets, mobile phones and other daily needs require some women to keep concurrent sexual partners who satisfy these needs. While one may provide clothing, another may provide food and the other may procure a phone or train ticket (Mah & Maughan-Brown, 2012). This type of sexual arrangement predisposes women to the risk of HIV/AIDS due to embedded, hegemonic practices that keep women from well-paid employment, for example, and women acquiesce in order to gain social and material benefits (Mah &Maughan-Brown, 2012). The construction of masculinity, where a man is expected to marry, have children and be responsible for his family, puts pressure on HIV seropositive men to live up to an idealised masculinity thereby putting themselves and their sexual partners at risk (Lynch, Brouard, & Visser, 2009).

A study in Hanoi has shown increased incidences of premarital sexual infections and abortion. The youths explained that the non-usage of contraception during sexual relations was proof of love and intimate relationships. Premarital sex is considered as a sin and the society frowns at encouraging the young adults to use contraception for fear that it will promote premarital sexual intercourse. In the event of sexually transmitted diseases or unwanted pregnancy as an outcome of sex between young adults, the woman is made to bear the entire consequences (Gammeltoft, 1999). In another study, Rigillo (2009) observed the impact of culture on the utilisation of free condoms for young people in Windhoek, Namibia. The hope of the programme for providing free condoms by Government and other HIV prevention agencies was to increase condom utilization among young people; but instead, the young people mistrusted the condoms based on brand, origin and cost. They likened them to cheap clothes that tear quickly. Even though many of the young people were unemployed and could hardly afford purchasing condoms, nevertheless, they did not use the free condoms.

In summary, it should be understood that the culture of a group of people changes as it interacts with other cultures and engages in modernising processes. Therefore an holistic understanding of the dynamics of sexual behaviours requires knowledge of structural factors such as migration and globalisation of culture at different times to ascertain the interactive influences of these factors on sexual behaviours; hence, the relevance of my proposed study.

2.3.1.3 The Influence of migration on sexual behaviour

Globalisation has created greater interrelationship between different economies. With high magnitude of social and economic inequalities which result from war and forced displacement, increased levels of international migration have been noted. Estimates available on the global scale indicate that 191 million individuals live outside their home country and over 86 million are estimated to be labour migrants (Baruah & Cholewinski, 2006).

Camlin, Kwena, Dworkin, Cohen and Bakusi (2014) reported that internal migration involving women in Kisumu area of Nyanza, Kenya, as a result of push factors (structural, family and individual), environmental characteristics of women's migration destination (opportunities for transactional sex, informal sector employment opportunities); the social context of migration (gender inequalities, transactional sex for income), and psychological factors (predisposition to risk taking, alcohol abuse) were some of the main reasons for high rates of HIV infections amongst them.

Rural to urban migration in developing countries has resulted in rapid urbanisation creating serious development problems, with housing, education and health care infrastructures increasingly becoming overburdened and migrants, especially in African cities, pushed into urban poverty (UNFPA 2001, 2004; Dodoo et al., 2007). Sexual behaviour amongst migrants is influenced by exposure to family planning, health education and socioeconomic characteristics of individuals (Leclere, Jensen, & Biddlecom, 1994).

Long distance truck drivers in Nigeria have been observed to pose a risk to the spread of HIV/AIDS from one region to the other (Atilola, Akpa, & Komolafe, 2010; Azuonwu, Erhabor, & Frank-Peterside, 2011). They leave their homes for some days before returning. While on their trip through different locations and at resting or refuelling points they consume illicit drugs and alcohol, and engage in risky sexual intercourse with female sex workers (Azuonwu, Erhabor, & Frank-Peterside, 2011). Most of them do not use condoms regularly during intercourse and about 55.3% had more than one sexual partner. More than 60% were at risk of been infected with HIV/AIDS.

Social isolation of city based workers in Niger Delta area far from their spouses cause social and emotional loneliness, which endears them to use sex workers. Multiple sexual partners and unprotected sex characterised their sexual relationships leading to the spread of HIV/AIDS (Udoh, Mantell, Sandfort, & Eighmy, 2009). Furthermore, Smith (2004) concluded in his study of premarital sexual behaviours amongst young adult migrants in Nigerian, that the value attached to procreation can inhibit condoms usage in premarital relationships. The young adults consider premarital relationship as the expression of procreation potentials.

Short distance movers, such as Minibus taxi drivers in South Africa, engage in risky sexual intercourse with young school girls putting them at the risk of HIV infection and unwanted pregnancies. The bus drivers also operate three-way sexual relationships with commercial sex workers, including older ladies selling various goods, and the young school girls, thus increasing risks for the spread of HIV/AIDS (Ncama et al., 2013). Highly mobile people in Africa have a high risk of HIV infection. In Kenya, migrants are predisposed to sexual risk taking (Brockerhoff & Biddlecom, 1999). In Uganda, people who have moved their residence within the past five years preceding the study have higher chances (three times) of being infected with HIV than those have remained in the same location for ten years (Nunn et al., 1995).

Female migrants from villages and educational setting where sexual education is not taught or discussed had poor knowledge of HIV prevention measures while providing sex services in Bali, Indonesia; thus, becoming highly susceptible to HIV infections (Januraga, Somers, and Ward, 2014). Yang and Xia (2008) observed how discrimination in employment against young female migrants in China exposed them to risky sexual behaviours more than their male counterpart. The resident registration policies restricted many of them from

securing independent accommodation, and migrants who stayed with family members that engaged in risky sexual practices were more likely to behave in similar way. The community where the migrants stayed also played its role in exposing them to high risk sexual behaviours.

Studies in China and Latin America have shown that rural-urban migrants lack knowledge about reproductive health issues; they lack good knowledge of contraceptive methods and usage (Qian et al., 2007; UNFPA, 2006; Qian & Zhao, 2005; He, Yang, & Tang, 2001; Zheng et al. 2001). Premarital sex by migrant female workers in China (56.6%) was relatively higher in comparison with female workers who are local residents (Rao, Zheng, & Xie, 2004).

In other related studies on the health status of rural-urban migrants in Peru and Bolivia, one's rural origin was a risk factor for lower usage of contraception (Bender, Rivera, & Modanna, 1993) due to lack of information, education and knowledge of safe sex. In Europe it was found that contraceptive usage in Germany is lower among migrants. This finding is due to inadequate family planning information from the origin of the migrants and limited outreach services in the destination areas. Amongst African migrants in Europe, it was observed that contraceptive usage was low due to fear about sterility and impact of the family (Carballo, 2005). High rates of induced abortion was observed among the floating (internal migrant) population in China. This was as the result of inadequate knowledge about contraception and misconstruing induced abortion for a method of contraception (Feng, Ren, Shaokang, & Anna, 2005; Qian, Tang, Chang, & Liang, 2005).

In conclusion, studies have shown that structural factors do affect sexual behaviour. However, these structural factors act in tandem with other factors like individual, relational (sexual intimacy) and family factors. Though much has been written on the influence of structural factors on unsafe sexual behaviour, gaps still exist in the literature on the specific contributions of drinking places (or 'joints' as they are more commonly known in Africa) and hotels to procure, and engage in, unsafe sexual practices.

2.3.2 Individual Factors

Broadly, individual factors include cognitive factors; drug usage and consumption of alcohol; economic and demographic characteristics, and sexual behaviour of people living with HIV/AIDS.

2.3.2.1 Cognitive factors and Sexual Behaviour

The cognitive perspective uses psychosocial factors to explain sexual behaviours. Individuals' evaluate their behaviour in terms of benefits and costs that is, the individuals are in control of all conditions to be able to make rational decisions.

A study in Nigeria on the utilisation of condoms during sexual encounters reveals that, condom usage depended on self-efficacy, social norms and affective attitudes to condom amongst University students at Ibadan (Alarape et al., 2008). A similar study in the same university identified barriers to condom usage as lack of sexual satisfaction, reduced sexual interest and health problems associated with condom usage. However, those who were introduced to condom usage by family members had a higher probability of using condoms during sexual encounters (Sunmola, 2005). Another study of young people and sexual behaviour in Nigeria (Egbochuku & Ekanem, 2008) reported that pornographic films, peer pressure, use of contraceptives and parental indifference influenced attitudes towards sex among secondary school students. The students had permissive attitudes towards sex with the males more inclined to engage in sexual activities than the females. Despite these observations, the effects of parental influence and pornographic films on adolescents' attitudes towards sex cannot be adequately explained from a cognitive perspective.

Furthermore, Izugbara (2008) examined youth attitudes from eight rural Ngwa communities in Obi-Ngwa Local Government Area of Abia State in Nigeria, and reports that they expressed clear knowledge of the socio-cultural, moral and psychological benefits of abstinence. They provided a link between sexual behaviour to outcomes such as educational attainment and respectability, and the influence of sexual behaviour on their development and transition to adulthood. However, they also said abstinence would affect their sexual wellbeing and power to have sex which will lead to frustrations. They were convinced that having sex is important in preparing them for future roles as fathers, husbands and bread-winners. Therefore abstinence could hinder them from gaining the experience that is important for future adult life. Meanwhile in Mozambique, incorrect assessment of personal sexual behaviours in relation to risk of HIV infection has been identified as a predictor of high risk sexual behaviours (Prata, Morris, Mazive, Vahidnia, & Stehr, 2006). The young men and women in Mozambique who considered themselves not at risk of HIV infection were actually moderately or at high risk of infection. Condom usage was associated with correct assessment of risk.

Finally, de Visser et al. (2014) have indicated that there is general condoning of premarital sex as part of wellbeing, but less tolerance of sex outside committed relationship amongst adults in Australia. The authors further elaborated that liberal attitude to homosexuality and abortion are associated with higher income, being female, sexual identity, higher levels of education, and being less religious; and that the men are more jealous than women knowing that a partner has another sexual relationship. In another related study on sexual behaviours, de Visser (2005) reported that young women in Australia express careless attitudes about STIs because they can be treated; hence they often engage in sex with non-regular partners without protection against STIs. In the same study, gender differences with regard to condom usage were also observed. Women felt uncomfortable to ask their partners to use condoms, reflecting the practices of women in Eastern Scotland who also limited condom usage to casual sex partners (Williamson et al., 2009). The women in the study engaged in unprotected sex with boyfriends in order to avoid unpleasant effects of condoms (like reduction of sensation and painful sex).

Generally, studies utilizing cognitive perspectives to examine sexual behaviours underestimate structural factors (gender, poverty and culture) and relational variables especially subjective meanings attached to symbols and types of relations thereby making them deficient for adequate and effective program intervention.

2.3.2.2 Subjective Meanings and Sexual behaviour

This section considers the essentials of meanings attached to symbols and individuals behaviours within the context of sexual relationships. Studies emphasising these aspects seek to explore the differences in sexual behaviour amongst individuals due to their own interpretation of contextual conditions surrounding sexual relationships.

Pleasure-seeking through sexual intercourse has been well documented (Nobelius et al., 2011; Adebiyi & Asuzu, 2009; Lifshay et al., 2009). The major reason for low condom usage among the youths in Nigeria is that condoms reduce sexual pleasure (Adebiyi & Asuzu, 2009); while the young women in Uganda keep "permanent" boy's friends who are a few years older than them for future marriage; they also keep male age mates as casual sexual partners; and older male sexual partners for gifts. Though gifts play important role in all the relationships, there are also subjective meanings attached to them (Nobelius et al., 2011); and both men and women seek sexual pleasure leading to low condom usage during coitus (Nobelius et al., 2011; Lifsay et al., 2009).

In Brazil, and especially among low-income male adolescents in the Favelas of Recife, condom usage during sexual intercourse was based on whether the relationship was considered 'steady' or 'casual' (Jaurez & Martin, 2006). Adolescent males in steady relationships were less likely to consider themselves at risk and more concerned about pregnancy prevention than the ones in casual relationships. The symbolic meaning of condoms in sexual relationships was an important determinant of condom usage. Other factors that influenced condom usage were family structure, religion, ethnicity, family member introducing a partner and poverty (Jaurez & Martin, 2006).

In another study of adolescents' sexual relationships in the USA, Bauman and Berman (2005) reported that the usage of condoms during sexual encounters was influenced by adolescents' interpretations of the sexual relationship. In 'messing' relationships condoms were often used during sex; in 'boyfriend-girlfriend' relationships condoms were not often used, while in 'hubby-wifey' relationships condoms were rarely used. Williamson et al. (2009) also observed in Australia that condoms usage during sexual encounters amongst young women were restricted to casual partners. The young women felt that with boyfriends, sex should be intimate and pleasurable without hindrance which condoms are known for.

It has also been noted that the 'dancehall' genre has influenced adolescents' sexual behaviours and male sexual violence in Jamaica (Crawford, 2010). There exist differences in the gravitation to sexually explicit lyrical contents by sex. Interestingly, female adolescents have gravitated and acted upon sexually explicit lyrical contents more than the males. Moreover, it was reported that the public transport drivers played dancehall genre music while transporting passengers which influenced the adolescents to have sexual encounters in the buses.

Although the examination of how meanings are attached to symbols and how types of relationships contextually influence sexual behaviour is relevant here, it should be understood that the sexual arena is the theatre for the interplay of the relative impact of structural factors on partners. Thus globalisation, culture, poverty, drug usage and gender issues are relevant in understanding the context in which symbolic meanings and relationships occur. Drug usage and alcohol consumption can impede judgment and produce contextual and momentous symbolic meanings that might be different from the normal state of mind devoid of drug and/or alcohol influence.

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2.3.2.3 The influence of Drugs and Alcohol on Sexual behaviour

Studies have identified drug and alcohol induced sexual behaviour as a risk factor for the spread of HIV (Tumwesigye, Wanyenze, & Greenfield, 2012; Azuonwu, Erhabor, & Frank-Peterside, 2011). Needle and syringe sharing is common among drug users with estimates suggesting that approximately two-thirds of injecting drug users never use condom with their primary partners and the one-third did not use condoms during intercourse with their casual partners (Rhodes et al., 1994; 1996). It has also been well documented that some individuals, both men and women, regularly engage in sexual intercourse while drunk. Tumwesigye, Wanyenze, and Greenfield (2012) report that 12% of men, and 16% of women in Uganda were intoxicated before engaging in sexual intercourse. The same authors observed that 78 percent of women who had sex under the influence of alcohol said their partners were also intoxicated; whereas most of the women had sex with regular partners, most of the men had unprotected sex with non-regular partners.

Hutton et al. (2008) used a clinical context to assess the effects of binge drinking on sexual behaviour among men and women in Maryland, USA. Women who binge drink were two times more likely to engage in anal sex as the non-binge drinkers; they were also twice as likely to have multiple sexual partners. Gonorrhoea was nearly five times higher among female binge drinkers than abstainers. Pyett and Warr (1999) report that street sex workers in Australia, due to their young age, inexperience, effects of alcohol and other drugs, found it difficult to enforce condom usage. Most of the private relationships examined were irregular or casual ones, only two women reported regular usage of condoms, despite the fact that they were aware of the multiple sexual relationships their partners were keeping. Many street sex workers had at times shared needles with their dealers' girlfriends.

As indicated by Pyett and Warr (1999), the influence of drug and alcohol on individuals' sexual practices differed by background variables such age and income. Thus background variables are critical in examining sexual behaviours.

2. 3.2.4 Background Variables and Sexual behaviour

Education enhances the social status of an individual. Lack of education amongst poor women can manifest in inadequate knowledge of contraception, and an inability to access reproductive health services. Some studies have indicated that educated women have a higher probability of using contraceptives (Chen, & Guilkey, 2003; Gereltuya, Falkingham, & Brown, 2007) Residing in a rural area correlates with lack of continuity with usage of methods and failure rates. Methods such as condoms that require regular supply may be exhausted where there would not be nearby place of getting one, more often in the rural areas than the urban ones (Ali & Cleland, 1999). Religion, residence and husband's influence are predictors of contraception methods amongst the women (Guilkey & Jayne, 1997; Mehrab Ali Khan & Rahman, 1996). Gereltuya et al. (2007) reported that the availability of contraceptives within short distances from their homes influences contraceptive method choice.

The upper classes in some developing countries keep a higher number of sexual partners and engage in riskier sex with low utilisation of barrier methods of contraception (Parkhurst, 2010; Tsui, Wasserheit, & Haaga, 1997). It has also been observed that a higher proportion of wealthy people contract STDs compared with poorer people. This observation is not consistent in all countries, thus making the relationship between STDs and wealth unclear. It might be that wealthier people are more likely to report an infection or simply to be more aware of symptoms due to their level of education, while poorer people lack access to services, and may define infection more narrowly than those who can afford treatment. This has the effect of reducing the number of times they have to look for money for health care (Falkingham, 2004).

Low levels of condom usage during intercourse at the early ages of adulthood in Nigeria have also been reported (Akinyemi, Awolude, Adewole, & Kanki, 2010; Adebiyi & Asuzu, 2009; Amoran & Ladi-Akinyemi, 2012; Danjin & Onajole, 2010; Mberu, 2008; Oyediran, Feyisetan, & Akpan, 2011). Condom usage at the initiation of sex among youths was below 23% (Danjin & Onajole, 2010; Mberu, 2008), while condom usage during sexual intercourse among people living with HIV was between 14.7% and 30.5% (Akinyemi, Awolude, Adewole, & Kanki, 2010; Amoran & Ladi-Akinyemi, 2012).

According to Oyediran, Feyisetan, and Akpan (2011), and Mberu (2008) some male youths in Nigeria reported unprotected sexual intercourse with female commercial sex workers; while some females reported being sexually assaulted. The correlates of condom usage during sexual intercourse among the youths were place of residence, ethnicity, exposure to mass media, level of education, economic status, religion, not staying together with parents. The reasons given by the youth for not using condoms was that condoms reduce sexual pleasure; and that one sexual act was less probable to cause harm. Additionally, it was found that sex without previous anticipation and preparation was associated with non-usage of condoms (Adebiyi & Asuzu, 2009; Mberu, 2008). Young females engaging in prostitution were more likely not to use condoms due to male coercion (Mberu, 2008).

In another study addressing the determinants of sexual behaviours, the factors influencing unsafe sexual intercourse amongst college students reported by Kanekar and Sharma (2010) were alcohol abuse, religion, low condom usage due to lack of sexual satisfaction, peer norms and social influence. A similar study amongst college students in Nepal indicated that condom usage at first sexual intercourse was influenced by age, caste and/or ethnicity, age at first intercourse, types of sexual partners, alcohol consumption and exposure to mass media (Adhikari & Tamang, 2009). Unsafe sexual behaviours have serious public health consequences most especially when the sexual acts are perpetrated by those living with HIV/AIDS.

2.3.2.5 People Living with HIV/AIDS and Sexual Behaviour

The sexual behaviour of people living with HIV/AIDS toward primary or other sexual partners have contributed to the spread of HIV/AIDS in Nigeria (Amoran & Ladi-Akinyemi, 2012; Udoh et al., 2009) and Uganda (MacLachlan et al., 2009). Twelve percent of seropositive pregnant women attending antenatal care at University of Benin Teaching Hospital did not disclose their status to sero-discordant partners for fear of rejection, discrimination and abandonment (Olagbuji et al., 2011)

Factors influencing condom usage during sexual intercourse among people living with HIV are in some ways different from the non-HIV positive youth. Amoran & Ladi-Akinyemi (2012) observed that condom usage among the non-HIV positive group was low (30.5%). However, the factors associated with condom usage amongst men were multiple sexual partners (3.2 averages), being married, high level of education, knowledge of partners' serostatus and prehistory of STIs; whereas negative sero- status, knowledge of partner's infection and living in a monogamous family, were predictors of condom usage among women.

Similarly, Akinyemi, Awolude, Adewole, and Kanki (2010) reported that factors influencing the usage of condoms amongst those taking antiretroviral drugs at Ibadan city centre were high levels of education, enrolment of both partners at the centre, gender, and currently in a married relationship. In comparison, those who are single, divorced, and widowed had very low levels of condom usage.

A recent study in Kenya found that 26% of seropositive pregnant women did not disclose their status to partners; disclosure rates depended on partner factors, counselling and

encouragement given to the women by care providers (Roxby et al., 2013). Twenty eight percent of those attending Kibera Clinic in Nairobi did not use condoms consistently with partners during sexual intercourse and the women were less likely to use condoms than the men (Ragnarsson et al., 2011). In South Africa, masculinity made HIV seroposive men resist change in their sexual behaviours (Lynch, Brouard, & Visser, 2009), with some deciding to introduce condoms during coitus but without disclosing their seropositive status thereby making the unsuspecting women resist these sudden changes in sexual behaviour (Mfecane, 2012).

Meanwhile at Jinja clinic in Uganda, the reduction in sexual pleasure experienced by men, painful coitus reported by women using condoms; and their desire for children, was responsible for low condom usage (Lifshay et al., 2009). While amongst a fishing community in Uganda, individuals consumed alcohol and marijuana and engaged in unprotected sex with those known to be HIV seropositive; the disclosure of seropositive status to sexual partners depended on the strength of the relationship especially with regard to sharing familial responsibilities (McArthur, Birdthistle, Seeley, Mpendo, & Asiki, 2013). Those who knew that their relationship was weak did not disclose their seropositive status and continued with the pre-diagnosis pattern of sexual behaviour; generally, the fishing community did not change their patterns of sexual behaviour even after testing positive and not minding whether there was disclosure or not. Another similar study in Uganda identified structural underlying factors of gender identities and inequality as responsible for stigmatisation and nondisclosure of HIV status by people living with HIV. In spite of their better looking appearance through the usage of antiretroviral therapy, anticipated stigmatisation was rife; while the women feared rejection by their partners, the men feared gossip and loss of dignity (Russel et al., 2016).

Social isolation, discrimination, stigmatization, and abandonment by partner have been cited as some of the reasons why HIV/AIDS seropositive individuals fear to disclose status to partners, relations and the public (Johnson, 2012; Owolabi et al., 2012; Sekoni, Obidike, & Balogun, 2012). Even health care workers isolate the HIV/AIDS patients from other ones, refuse to admit them in the hospital, wear extra hand gloves when examining them and charge very high fees for care (Owolabi et al., 2012).

Stigmatisation of people living with HIV/AIDS restrains them from disclosing their HIV status. They engage in unprotected sex with partners, thereby endangering their lives

and other people especially where there is wide spread practice of sex with multiple partners. Eliminating discrimination and stigmatization of people living with HIV/AIDs can help in reducing the burden associated with the disease. In this respect, the public and other social institutions such as the family have crucial roles to play.

2.3.2.6 Risk Behaviour and HIV/AIDS

The discussion in sections 2.3.1.1 through 2.3.2.5 have identified factors influencing risky sexual behaviours and HIV/AIDS infection. The issues of poverty, patriarchy, pleasure seeking, procreation, alcohol and drug consumption, stigma and discrimination are predictors of high risk sexual behaviours and HIV/AIDS infection. In patriarchal societies such as Nigeria, women possess less negotiation powers for safer sex and in several instances, the use of condom is the prerogative of the men. The near universal importance of procreation and a critical factor for union formation compel some HIV/AIDS sero-discordant partners to engage in sex without the use of condoms, thus, placing the other HIV/AIDS sero-negative partner at risk of HIV infection. In similar manner, unemployed commercial sex workers engage in unprotected sex to satisfy the sexual yearning of their clients, who would decline payment or patronage, if they (sex workers) insist on the use of condoms. These risky behaviours expose several of them to HIV/AIDS infection. Furthermore, the fear of stigma and discrimination has made some individuals conceal their HIV seropositive status. They for one reason (such as poverty or procreation) engage in sex with unsuspecting partner creating possible avenue for HIV/AIDS infection

2.3.3 Institutional Regulations and Sexual Behaviour

The focus of this perspective is on the roles of social institutions in regulating sexual behaviours, especially regarding the family and schools. Sharma and Mufune (2011) report that school children in grades 8, 9 and 10 in Namibia who had support, and were cared for, and guided by their parents, had their first sexual experience at an older age. In a similar study in Tanzania, Wamoyi et al. (2011) observed that parental control of young adult's sexual behaviour was motivated by fear of being infected with HIV and other sexually transmitted infections, cultural pride such as good reputation and benefits that would be derived from bride wealth. However, young people engaged in high risk sexual behaviours especially during social events such as disco and video shows (including pornographic movies); festive celebrations such as New Year, Easter, and Christmas. Some of the young

adults observed that their parents were not living exemplary life because of their attitude to keep multiple sexual relationships, inability to take good care of the family, and at the same time spend a lot on frivolous things such as alcohol.

Parental protective factors have also been identified as a predictor of early involvement in sexual intercourse among African-American adolescents (DiIorio, Dudley, Soet, & McCarty, 2004). Children whose parents provide less monitoring and supervision were at higher risk for early involvement in sexual intercourse. Other protective factors were behaviour self-concept (self-esteem), popularity self-concept, preference for abstinence, personal and parental values.

In families where parents exert strict control over the movement and activities of their female adolescents, they are more likely to engage in rebellious acts such as lying to their parents in order to create time to associate with their more mobile, less restricted friends and lovers. Through this kind of association some of them practice unsafe sex (Azaiza, 2005; Schmelzle, 2001; Rodgers, 1999). Parents who work outside the home have less time with their children and this factor provides them with the opportunity to engage in sexual activities (Schmelzle, 2001). It has also been observed that young adults who do not get information about sexual life rely on whatever they hear from peers, friends and media. Most often the information is either inadequate or misleading. Manhart et al. (2002) reports that the lack of accurate sexual health information for young women might mean they are unaware that unsafe sex may lead to disease.

Meanwhile amongst Kenyan in-school adolescents, it was observed that they wanted freedom to express their own sexual desires. They had liberal attitude towards pre-marital sex influenced by religion and cultural values; a sexual double standard existed whereby pregnant female adolescents were expelled from school but the male responsible for the pregnancy was allowed to continue (Adaji et al., 2011). However, the interaction of religion, school environment and culture with the attitudes of the adolescents and reproductive health indicators amongst them was not adequately explained due to the focus of the perspective of the study.

In sum, a more complex explanation arising from an integrated theoretical explanation of the relationship between contextual factors and the different levels of sexual intimacy that safeguards or predisposes individuals to HIV/AIDS infections was not located in the

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literature on this topic. Research into the possible correlates regarding levels of sexual intimacy and unsafe sexual behaviours can provide both academic and public health benefits.

2.4 The Effects of HIV/AIDS -Need for Further Urgent Action

Orphanhood has increased in Sub-Saharan Africa, where it has been reported that 12 million children have lost one or both parents to AIDS. It is also estimated that by the year 2010, the number will have increased to 18million (FAO, 2011). The loss of agricultural labour in countries where predominantly farmers and rural dwellers are HIV infected will affect food productivity thus creating food insecurity and poverty for many decades to come (FAO, 2006). The Ministry of Agriculture and Rural Development in Kenya quantified lost working days due to HIV/AIDS up to 329,000 days within the agricultural sector in the year 2002, compared to only 45,000 in 1990.

Any community that has an HIV/AIDS prevalence rate of more than 20% will have a reduction in individual income of about 2%. South Africa, for instance, is estimated to suffer the effects of HIV/AIDS on GDP of 17%, translating to 22 billion US dollars (Kalla, 2003). People infected with HIV/AIDS obviously suffer serious health problems but their family and community members are also affected as they are forced to bear the inconveniences of staying with the patient, often providing essential help. Currently, Nigeria has 17.5 million vulnerable children. It has been estimated that 7.3 million children are orphans, either they have lost a parent or both due to various causes and 2.23 million have lost their parents from HIV/AIDS 260,000 children are currently living with HIV/AIDS (NACA, 2012). UNAIDS (2013) global progress report on HIV has shown progress in the efforts to reduce new HIV infections have yielded some results. The reduction in the infection rates of new HIV cases in 26 low and middle-income countries bears credence to this decline. However, new infections are on the increase in the Middle East, North Africa, Eastern Europe, and Central Asia except in Ukraine.

In Africa, there are also signs that risky sexual behaviours are increasing, such as increase in concurrent multiple sexual relationships in Burkina-Faso, Congo, Cote d'Ivoire, Ethiopia, Gabon, Guyana, Rwanda, South Africa, Uganda, Tanzania, and Zimbabwe. Condom usage has also declined in Cote d'Ivoire, Niger, Senegal and Uganda. In 2012, there were decline in access to condoms in Namibia, while Uganda has experienced frequent condom shortages especially the free ones (UNFPA, 2013).

The cumulative effects of the decline in programme intervention services and the effect of some structural factors on sexual behaviours are responsible for the new infection cases of HIV. In 2013, there were about 2.4 million incidence cases of HIV globally, with 70% occurring in Sub-Saharan Africa (WHO, 2014b). New cases of HIV infection amongst children is still high in Nigeria- 110,000, Lesotho-12,000, Democratic Republic of Congo-14,000; Cote d'Ivoire-13,000, Chad 6,300; and Angola-12,000. Despite the efforts to tame the tide of new infections still produce very slow rate of decline (UNAIDS, 2013).

In conclusion, gaps in the literature on unsafe sexual behaviour need to be addressed. These gaps are: (1). Previous studies have concentrated largely on individuals rather than partners in sexual relationships; thus there are no studies on quantitative measurement of levels of sexual intimacy (sexual exclusivity and casual sex as two extreme ends on the continuum of sexual intimacy) correlates, and HIV/AIDS risks (2). Health behaviour models that have largely driven the research on unsafe sexual behaviour for the past three decades, lack postulates that measure relational and distal variables to explain complex sexual behaviour. Hence it has become imperative to utilise other models or theories such as the one proposed here for the study of sexual behaviours and HIV/AIDS infection (3). The influence of structural factors such as alcohol drinking joints and the availability of hotel and other accommodation for transactional and illicit sex have not attracted considerable attention of scholars in the study area.

This doctoral study has been designed to respond to these gaps in literature. Safe sexual behaviour is the most effective method of preventing sexually transmitted diseases including HIV/AIDS, and the consequence of unwanted pregnancies. It is clear that programme interventions aimed at reducing unsafe sexual behaviour should address individual, social, cultural and economic differences and other contextual factors which most of the previous health models have played down. I argue for a theoretical framework with postulates that attempts to measure the range of perspectives of sexual behaviours, is required for research into contextual issues influencing unsafe sexual behaviours.

UNAIDS (2010) vision of zero new infections of HIV cannot be achieved without a thorough re-examination of the effects of contextual factors on sexual behaviours that predispose individuals to HIV and other sexually transmitted infections. This cannot be done effectively with the previous health models which have not incorporated relational and distal variables into their postulates for the examination of sexual behaviours.

The present study utilises an integrated theoretical perspective (the sexual webs model) which attempts to account for the multiplicity of perspectives of sexual behaviour in order to provide a holistic explanation of contextual issues surrounding unsafe sexual behaviours. It focuses on constructs such as sexual capacity, sexual motivation, sexual performance and levels of sexual intimacy with the sexual webs to provide better insights into the complex and contextual issues surrounding sexual behaviours. Thus, the model developed possesses a more powerful analytical potential of contextual sexual behaviours than the previous health models.

2.5 Theoretical Conception

The theoretical conception of this research is that sexual behaviour especially unsafe sex results to unwanted pregnancies and sexually transmitted diseases including HIV. Although there are contending opinions of what sexual act constitute safe or unsafe sexual behaviours; the belief that once the sexual outcomes of sexually transmitted diseases including HIV/AIDS are against the initial motives of the participants, it would be considered unsafe sexual behaviour. Unwanted pregnancies, STDs and HIV/AIDS are linked to unsafe sexual behaviours (Ezzati et al, 2002; Timiun, 2012). However, previous research has focused on the individuals rather than partners, to explain unsafe sexual practices and its correlates. Part of the problem has been lack of health behaviour models with postulates that explains both proximal and distal factors influencing unsafe sexual behaviour at the partners' level (see Table 1E, Appendix E, for a summary of the limitation of health behaviour theories). And almost the entire studies based on these models are limited to the extent of their postulates. Therefore, this study adopts an integrated theoretical model with robust constructs such as sexual attributes and sexual webs to provide better insight to contextual issues (individual, family and community) surrounding unsafe sexual behaviours at the partners' level.

A theory is a systematic way of understanding events or situation. Its components are set of concepts, definitions and propositions that explain or predict these events or situations by illustrating the relationship between them (US National Cancer Institute 2005). Models themselves are not the facts but miniature representation of facts which illuminate the path of the researcher in search of these realities. A model is broader than theory- it consists of several theories brought together to explain a phenomenon or group of phenomena" (Timiun, 2012, p.120; US National Cancer Institute 2005) The sexual webs model provides a more coherent, analytical framework than other social scientific models in regards to the examination of sexual behaviours; as it is the only unified explanatory model incorporating perspectives from Public Health, Cognitive Psychology, Sociology and Political Economy

2.5.1 Further Definition of Some constructs Associated with Sexual webs model

Sexual capacity, sexual motivation, sexual performance and sexual webs constructs have been explained in section 1.4. However, there is the need to further define some constructs that are critical for the description of the characteristics and relationships among sexual webs.

2.5.2 Open or Infinite sexual web: "This is a sexual web that has so many individuals that it is impossible to know each other. Sexual relations involving commercial sex workers are good example of this type of web. A migrant who starts other sexual relations in his or her new destination may extend this web to the new location" (Timiun, 2012, p.122).

2.5.3 Closed or Finite sexual web: "This refers to a web with few individuals who know each other. An example of this may be a rich man with his wives and concubine" (Timiun, 2012: p.122).

2.5.4 Positive sexual web: "It is a web that at least a member of it is infected with HIV/AIDS or/and sexually transmitted diseases and soon others will also be infected. A community with many positive sexual webs will experience rapid spread of HIV/AIDS or/and sexually transmitted diseases" (Timiun, 2012, p.122).

2.5.5 Negative sexual web: "It is a web that none of its members is infected with HIV/AIDS or sexually transmitted diseases" (Timiun, 2012, p.122).

2.5.6 Mixed sexual web: "This is a sexual web that its members exhibit different characteristics and sexual activities that are in consonant with two or more other identified sexual webs in the community" (Timiun, 2012, p.122).

2.5.7 Exclusive sexual partners: "This is sexual relations between two or three individuals who stay together and monitor each other carefully to avoid the admission of another partner" (Timiun, 2012, p.122)

2.5.8 Transitivity sexual partner: "if A = B, and B = C, and C = D, then A = D, the law of transitivity. There would be no direct sex between partners A and D, yet, A can infect D with HIV/AIDS and other sexually transmitted diseases (See figure 2.1; Timiun, 2012, p.122).



Figure 2.1 Illustration of Transitivity Sexual Partner in Heterosexual Relation.

Figure2.1. In the figure above, C = arrow showing sexual relationship. "Male B has sexual relation outside his two partners with female A2 as shown by the black thin arrow. Suppose female A1 is infected with HIV/AIDS (from any source), she will infect male A, and male A will infect female A2. Female A2 will infect male B, and Male B will then infect female B1 and female B2. Female A1 is a transitivity sexual partner to male B; that is Female A1 to male A to female A2 to male B; while female B1 and female B2 are transitivity sexual partners to male A; that is either female B1 or female B2 to male B to female A2 to male A. This illustration applies to the spread of sexually transmitted diseases also. The illustration is also true amongst same sex partners. In that case it will be man to man, or woman to woman. Adapted from "Sexual Webs Model for the Explanation of Unsafe Sexual Behaviours and the Spread of Sexually Transmitted Diseases Including HIV/AIDS," by G.A. Timiun, 2012, Asian Social Science, Vol 2. No 7, p. 125. Copy right 2012 by Canadian Center of Science and Education

Figure 2.2. Integrated Theoretical Perspective for the Explanation of Unsafe Sexual Behaviours



Figure2.2. Adapted from "Sexual Webs Model for the Explanation of Unsafe Sexual Behaviours and the Spread of Sexually Transmitted Diseases Including HIV/AIDS," by G.A. Timiun, 2012, Asian Social Science, Vol 2. No 7, p. 125. Copy right 2012 by Canadian Center of Science and Education

CHAPTER THREE RESEARCH METHODS

3.1 Introduction

This chapter provides information on the research design, research location, sampling methods and sample size; instrumentation; constructs and variables; data analysis; ethical issues and perceived limitations of the methods.

3.2 Research Design

The research utilised both quantitative and qualitative methods. Both survey and in-depth interviews were conducted to obtain data for the research. The quantitative and qualitative data was nested, and the qualitative data was used for gaining further insight into the quantitative data. This mixed method technique is referred to as concurrent transformative strategy (either nested or concurrent triangulation). It ensures that better insight would be obtained from the qualitative data to provide deeper understanding of some findings from the quantitative data (Moore, 2008). The limitations of this design are unique and based on the stated rationale for its adoption by the researcher.

The perspectives of unsafe sexual behaviours in the various academic disciplines (public health, culture, symbolic interactionism, and political economy) have collectively implicated overt and covert actions as precursors to unsafe sexual practices. Therefore, this study fuses together both overt and covert issues to obtain a holistic understanding of the contextual factors influencing unsafe sexual behaviours and the spread of HIV/AIDS. Thus neither the qualitative nor the quantitative method alone would be sufficient to provide the desired data to realize the research objectives.

Many researchers have utilized triangulation method elsewhere to obtain better research findings on certain phenomena (thus providing information on the validity of this method). Moore (2008) examined power relations in black lesbians' stepfamilies using triangulation method. She conducted structured interviews with 100 women in lesbians' household that had at least one black partner. She also conducted in-depth interviews, focus group discussion, and participant observation amongst the women. Consistently, the women reported same things about their relationship in the survey, interviews and focus group discussion. In another study, Cherlin, Burton, Hurt, & Purvin (2004) examined if there was any link between sexual and physical abuse, and family formation in later years. The authors interviewed more than 2000 children and care giver givers in the town of Boston, Chicago, and San Diego in 1999. The interviews were repeated amongst over 250 separate families in the same cities in the following four years. The same questions were asked in both the survey and interviews, and conducted ethnographic observation to probe deeper from the survey data. The researchers reported that women who suffered past abuse were less likely to marry. This result was confirmed using the in-depth interviews.

3.3 Research Location

Nigeria became a nation-state in 1914 as a result of the amalgamation of the northern and southern protectorates (NDHS, 2013). The nation "occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic Coast in the south to the fringes of the Sahara Desert in the North. The country shares boundaries with the Republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the west". Nigeria is the most populous country in Africa with a population of 140,431,790 individuals (National Population Commission [NPC], 2010, p.3).

In the period preceding the amalgamation, they were several ethnic and linguistic groups in the northern and southern protectorates such as Oyo, Benin, Nupe, Jukun, Kanem-Bornu and Hausa-Fulani empires. These groups organised themselves into kingdoms and emirates with advanced system of government. Other organised strong ethnic groups with decentralised system of government were the Igbos, Ibibio, Ijaws and Tivs. It was the initiation of the British rule that brought about the amalgamation of the northern and southern protectorates in 1914.

Nigeria became independent in October, 1960 with three regions- Northern, Western and Eastern regions. The constitution provided for a parliamentary system of government with Lagos as the administrative Headquarters. Later in October 1, 1963 Nigeria became a republic, and adopted a new form of administration. Currently, "the country has 36 states and Federal Capital Territory at Abuja. These states are grouped into regions- North Central, North West, North East, South East, South -South and South West (see Maps, pp.v and vi). The mainstay of Nigeria's economy is agriculture, oil and gas resources" (NDHS, 2013: P3).

The North Central Zone where Benue State is located has a population of 20, 369,956 people while Benue State has 4,253,641 individuals. Thus the population of Benue State

represents 21% of that of the North Central Zone and 3% of the population of Nigeria. The national trend in the dichotomy between urban and rural dwellers is 49.8% and 50.2% (NPC, 2010; GEOHIVE, 2010)

"Tivland is found in the North Central, Nigeria. It covers an area of about 30,000 square kilometers and stretches from 60 30' to 80 10' north and longitude 80 10' east. Tiv people are predominantly farmers and are found originally in towns and villages in Benue, Taraba, Nasarawa and Plateau States. They were over 2 million in 1991" (Timiun, 2012b: P.64; Federal Office of Statistics 1996).

"The word Tiv has triple meaning. It is the name of Tiv nationality; it refers to language and it is also the name by which Tiv know their ancestor- father Tiv. Tiv has cultural as well as political significance. Thus the name is bound to live (Wegh, 1998). The Tiv are patrilineal, and trace descent uni-lineally-that is through the male line. The Tiv also practice viri-patrilocality, so that practically every woman at marriage leaves her home and joins her husband in the latter's home" (Timiun, 2012b, p.64; Akiga, 1939; Wegh, 1998). History has revealed that Tiv had two sons- Ichongu and Ipusu. Thus the two major political and social blocks in the Tiv nationality are the Ichongu and Ipusu, traceable to the descendants of the first two sons of Tiv.

According to Dzurgba (2007), precolonial Tiv society was an agrarian community. The *Shagbaor* (rich and influential man) was rich in farm produce for exchange of goods and services. Because many hands were required for work on the farms, the shagbaor would marry many wives and also had many children. The shagbaor then became synonymous to having large farms, many wives and children; and been influential in the community.

It was easy to realise that many people aspired to be shagbao*r* by hard work, commitment, and by marrying many wives and having children that will help with work on the farm. It was pride for a man to feed his family and have excess to entertain visitors, and give to orphans and widows. However, men who were not rich were contended with one wife, fewer numbers of children and small farms. Consequently, two types of marriage existed amongst the Tiv people- polygyny and monogamy (Dzurgba, 2007)

Marriage was only allowed between two separate kin groups (exogamy). The kin groups were very important in the stability of the marriage. It was also important for the woman and the man to remain virgins till they are married. Even though the importance of virginity was not strongly emphasised on part of the man as it was for the woman. The value of virginity was rooted in the belief that it promotes mutual goodwill, understanding, tolerance, trust, and cooperation in marriage. The stability of marriage was not only a source of joy for the families involved but also for the kin groups

Adultery was a crime that required open trial at the customary court held at the common-room known as Ate. Both the woman and the man were severely sanctioned if found guilty. Apart from paying fines, such men were never trusted and did not receive goodwill from their peers and elders. Equally, the woman also was relegated from the status of been chaste and responsible among her friends and by in-laws.

With the advent of colonial rule which introduced formal western education and Christianity, several changes have taken place. Marriage can now be contracted in courts and by religious organisations. Though other individuals are still practicing traditional marriages, such marriages have undergone reforms. Those who are still practicing polygyny are not doing so for the need of labour, but for traditional prestige of having many children who may be social security in old age (Dzurgba, 2007)

People are now working as civil servants, business individuals, entertainers, and as professionals in different sectors of the economy. Mobility between locations has been enhanced and people are no longer strictly tied to the traditional values.

The Tiv and indeed the entire Nigerian society are patriarchal with higher levels of illiteracy among women. For instance, 40% of the women and 30% of men have no formal schooling. The figure is further high for women (54%) and men (40%) in the rural areas. The regional percentages of those without formal education are 38% and 22.6% for women and men respectively (NDHS, 2013). The low levels of educational attainment have translated to low levels of economic status and higher levels of poverty, but the bite is harder on the women than the men.

The reproductive health situation in Nigeria is generally poor. The Utilisation of modern contraception is still very low. The contraceptive prevalence rate amongst women in Nigeria is 16 percent. The rate increases from 6 percent amongst women aged between 15 and 19 years to 21 percent amongst those aged between 35 and 39 years, thereafter, it declines to 12 percent amongst those aged between 45 and 49 years. The male condom (5 percent) is the most commonly used method of contraception (NDSH, 2013). Men aged 30-34 years reported the highest rate of ever used a method of contraception (52 percent). Reasons for low utilisation of modern methods of contraception are myth and misconception,
low status of women, low level of knowledge, poor attitude of service providers and low quality of service including non-availability (FMOH, 2001)

An estimated number of 3,229,757 people are infected with HIV in Nigeria, and approximately 210,031 people died from AIDS in 2013 alone (NACA, 2014). In the same year (2013), there were 220,394 new infections of HIV and 1,476,741 individuals required anti-retroviral drugs. Reasons adduced for rate of infections in the country are low personal perception of risk, multiple concurrent sexual partners, transactional sex, poverty, poor quality of health care services and services for sexually transmitted infections (STIs); gender inequalities and inequities, and HIV related stigma and discrimination. Life expectancy has fallen from 53.8 years to 50 years for women and 52.6 years to 48 years for men. Major factors responsible for the transmission of HIV are poverty, low levels male and female condoms usage, high rate of casual and unprotected sex, stigma and discrimination; and cultural and religious practices (WHO, 2009).

Receipt of ante-natal care services varies amongst women by location of residence and age. Forty-six percent of young women below the age of 20 years did not receive antenatal care in 2013. Whereas forty seven percent of rural women aged between 15 and 49 years did not receive ante-natal care, only 11 percent urban women did not receive ante-natal care (NACA, 2014). Harmful practices such as female genital mutilation, forced marriage, traumatic puberty initiation rites, labour and delivery practices, wife inheritance and wife battery have an immense contribution to the low level of reproductive health in Nigeria. Female genital cutting leads to haemorrhage, shock and infections such as Hepatitis B and HIV. Other consequences are recurrent urinary infection, chronic pelvic infection, and infertility; prolonged obstructed labour, vesico-vaginal and recto-vagina fistula (WHO, 2006).

3.4 Sampling Methods and Sample Size

Tivland is divided into two major blocks- the Ipusu and Ichongu blocks. The Multi-Stage Area sampling method was used for obtaining samples of respondents for quantitative data collection using the questionnaire, while purposive sampling was utilised to select respondents for qualitative data collection using in-depth interviews. One urban and one rural area were selected from each of the two blocks (four areas in all – two urban areas and two rural areas). One hospital was selected from each of the two blocks to sample people living with HIV/AIDS and who come to the centres to collect Anti-retroviral drugs. The other segment of the sample was drawn amongst residents in the communities who were aware that they are not HIV positive.

A probability sampling without replacement (raffle draws) was used in selecting Gwer West (urban area) and Guma (rural area) from the homogeneous settlements of Ichongu block; while Gboko (urban area) and Konshisha (rural area) were selected from the Ipusu using the same method. General Hospital, Aliade was then selected from Gwer West, while NKST Hospital, Mkar was selected from Gboko to obtain samples of those living with HIV. The same process was used in selecting Udei from Guma out of several other rural settlements such as Kaseyor, Yerwata, Ukohor, Umenga, Agasha, Daudu, Uluva, Yogbo etc. Similarly, Jovkyundan was selected from Konshisha out of other rural settlements such as Tse-Agberagba, Gungul, Korinya, Agbeede, Awajir, Tsuwe, Mbaakpur, Achoho, Iber, Akputu etc.

The following steps were taken to implement the above state sampling methods: Step 1: Tiv Land was divided into two based on the natural existing blocks of Ichongu and Ipusu

Step 2: One urban area (Gboko, Gboko Local Government) was chosen from Ipusu block through raffle draw

Step 3: One urban area (Aliade, Gwer Local Government) was chosen from Ichongu block through raffle draw

Step 4: One rural area (Jovkyudan, Konshisha Local government) was chosen from Ipusu block through raffle draw

Step 5: One rural area (Udei, Guma Local Government) was chosen from Ipusu block through raffle draw

Step 6: simple random sampling was used in selecting respondents from all the selected sites

3.4.1 Sample Size determination

Sample size determination was guided by the formula $B = \frac{x^2 pq}{d^2}$

X = standard normal deviation at 95%, which is 1.96,

p = proportion of partners in sexual exclusivity relationship but since search in literature has not yielded that proportion from study of this nature, p will be considered to be 50% which is 0.5 (equally likely events).

q = 1- p = 0.5, d = 0.05 level of precision, B = $\frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384$

More than 384 respondents were selected from each of the four locations as follows: Urban-Ipusu – 411 (183 males, 228 females); Urban-Ichongu – 394 (190 males, 204 females); Rural-Ipusu – 396 (169 males, 227 females); Rural-Ichongu – 400 (207 males, 193 females). It brings the total numbers of respondent to 1601.

A sample size of 805 individuals was randomly selected using a systematic sample method after the list of people living with HIV and who attend clinic in the hospitals was obtained by the research team. The rest of the respondents (796) were sampled from their residences after the villages were selected using a table of random numbers. Purposive sampling method was also used in selecting 20 respondents for in-depth interviews (see Appendix D, p.329). All the respondents have tested for HIV at least once. The 796 respondents were sero-negative at the last time they tested for HIV. Some of the respondents said they tested for HIV when they wanted to marry, as it has become a condition for wedding in the church; others got tested when they went for donation of blood or presented themselves for treatment of ailments such as malaria, or wanted a medical certificate, while others were invited for test when their wives registered for ante-natal care, and a host of other reasons. Those who have knowledge of their HIV status but did not know their partners HIV status were included in the sample.

A total sample size of 1621 individuals including men and women aged between 18 and 65 years old, who are presumed to be sexually active, were selected in total. The sample excludes those below the age of 18 years; those with AIDS and opportunistic infections, pregnant women and those who were mentally ill.

The ratio of women to men is seven hundred and forty nine is to eight hundred and fifty two (749:852), given that the Tiv community is a patriarchal society, the men are more privileged than the women. Twelve out of 20 respondents selected for the in-depth interviews are women, and 7 of them are living with HIV; while three of the men who participated in the in-depth interviews are also living with HIV. All respondents living with HIV were interviewed at the hospitals.

The sampling method adopted in this research is aimed at including the sub homogeneous groups in the sample in order to reduce the sampling error. It also afforded the researcher the opportunity to make comparisons among groups for a clearer understanding of certain issues. Furthermore, the survey sample size of 1601 individuals is considered to be large enough to minimize the standard error and increase the effect size.

3.5 Instrumentation

A structured questionnaire was used in collecting information on the sexual capacity, sexual motivation, sexual performance, sexual webs, and HIV/AIDS amongst sexual partners (see Appendix D, p.324). About one thousand eight hundred (1800) copies of the questionnaires were produced for the quantitative aspect of data collection.

The questionnaire is divided into four sections: (1) socioeconomic and demographic variables; (2) reasons for engaging into sexual relationship; (3) sexual behaviours; (4) issues about HIV. The questionnaire contains nominal, ordinal and scale variables measured using closed and open ended questions. There are 71 questions examining sexual capacity, sexual motivations, sexual performance, HIV and sexual webs variables. The data collection took place between April and September, 2014. A total of sixteen (17) field assistants, made up of mostly nurses, midwives and HIV counsellors were recruited for the data collection; four assistants in each of the four areas. The distribution by sex was six females and eleven males; one of the females helped with data entry.

The field assistants were trained on the aspects of data collection. The training was conducted for one day in each of the four areas. Thereafter, a mock data collection session was conducted to ascertain the ability of the field assistants to collect data, and the reliability of the measurement instrument before the commencement of the real data collection exercise. The research assistants were able to adequately translate the questions from English to Tiv for the proper understanding of the respondents. Due to the face to face interviews using the questionnaire, the response rate and internal consistency was over 95%. During the data collection proper, similar high rate of response was recorded. A few questionnaires that were incomplete were excluded from the final analysis.

Samples of common condoms in use in the study were given to the field assistants. This was to enable the respondents (especially the illiterate ones) to identify which brand of condom they have been using (for those who had used a brand) if they could not remember the brand name. The samples of condoms were shown to them only after a respondent had difficulty in recalling the brand name. This strategy was adopted in order to ascertain the actual level of condom usage in the study area. Completed questionnaires were sorted and edited in the field before retrieval for storage. The questionnaires were coded at the end of the data collections exercise and the SPSS 21 software was used for the data entry and analysis.

An audio recorder was used for the collection of the qualitative data by recording the discussions during the in-depth interviews for the purpose of transcription after the data collection sessions. Twenty in-depth interviews were conducted on structural and distal factors influencing sexual behaviours. The data have been transcribed, analysed and report written on findings

The people were generally receptive to the research; however, a lot of difficulties were encountered due to weather conditions and the terrain. It was during the wet season and the farmers were busy on the farms, so, several rescheduled visits were made with potential respondents before interviews were finally conducted. The rains disrupted research activities on several occasions. It was also a difficult task for the researcher to move from one location to the others with the distance of over 200km between each of the locations to supervise data collection. Despite the experiences, the research team persevered, and the data collection exercise was completed in September, 2014.

3.6 Constructs and Variables

The constructs of the integrated theoretical perspective (the sexual webs model; Timiun, 2012) are sexual capacity; sexual motivation; sexual performance and the sexual webs. Variables are derived from each of the constructs as explained in the followings sections.

3.6.1 Sexual Capacity Variables

Sexual capacity variables are divided into individual variables, family, community and global variables.

3.6.1.1 Individual variables: They include age, marital status, education, position or role in the social setting, attitude to sex, perceived vulnerability to conception or/and HIV/AIDS and sexually transmitted diseases, religion, occupation, income and perceived severity of conception or been infected with HIV/AIDS or/and sexually transmitted diseases. The age of the individual refers to whether he or she is adolescent, young adult, adult or old, whereas marital status refers to whether the individual is single, married, divorced, separated or widowed. Education includes his or her level of education and other skills. The position of the individual in the social setting refers to whether he or she is a religious, political or

community leader, an administrator or plays some other important role in the community. Attitude to sex would be the individual's disposition to sex; whether he or she favours sex no matter how it is performed. Perceived vulnerability refers to the extent to which the individual feels he or she can be infected with HIV/AIDS or/and sexually transmitted diseases or become pregnant (women). Religion refers to the type of religion the individual practices. Occupation refers to what the individual does for a living. Income was the individuals earnings from their work or business activities. Perceived severity is the individuals' perception of the cost of been infected with HIV/AIDS or/and sexually transmitted diseases.

3.6.1.2 Family variables: This includes type of family, family income, the number of surviving children of the couple, family knowledge of the individual's sexual relations and support for what kind of sexual relations. The type of family the individual comes from can be extended, nuclear, biologically intact, step family or single parent family. The support for kind of sexual relation refers to whether the family supports single or multiple sexual partners.

3.6.1.3 Community variables: The variables here include whether the settlement is urban or rural; the laws or policies regulating pre-marital sex; whether the culture allows multiple sexual partners for both males and females or for only men. Other variables include the cost of marriage; the community perception of transactional sex and prostitution; gender inequality, poverty, social networks, the level of hotel business; levels of drugs use and alcohol drinking joints; communal clashes and homelessness; and availability of contraceptive methods (condoms).

3.6.1.4 Global variables: Pornographic images are beamed to individuals via the internet thereby reinforcing the desire for sex. Contact with potential sexual partners using electronic means has become easy. Sexual relations extend beyond the individual's immediate environment to other regions of the same country or other countries. These variables influence the individual's sexual behaviour and empower him or her. Their influence on contraceptive method choice and usage is also important in understanding the dynamics of sexual behaviour and contraception.

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3.6.2 Sexual Motivation Variables

Motivation variables include how the individual intended to perform sex and derive the perceived benefits. The intention to engage in unprotected sex may be to get a child; material gains; love; intimacy; and as a mark of faithfulness to a partner or further still for high quality sex. A young woman may be prepared to succumb to unprotected sex with old, rich and influential individual in order to get money and also be influential. These and several other intentions are motivation variables.

3.6.3 Sexual Performance variables

Performance variables include all the things that people actually do to enhance sexual encounters. This can be before or during the sexual encounter. Taking of alcohol or drugs to perform sex constitutes part of the performance. The achievements through performing sex reinforce the desire for future performance to attain the yet unachieved targets. "The actual things the individuals do that constitute 'good' sexual performance and better results are difficult to discard if the individuals still desire similar positive results. If unprotected sex or prolong drugs induced sex constitute good performance are addressed. Condom failure due to breakage" (Timiun, 2012, p.124) and linkage, infidelity and lack of sexual satisfaction, are all performance factors. Thus the health risk from sexual performance can be high, moderate, low or very low based on different performances such as 'no protection', 'sometimes with protection or protection with known incidences of failure'; often 'use protection', and sex with 'exclusive partners' only.

3.6.4 Sexual Webs Variables

Types of sexual relationships (heterosexual, bisexual, homosexual, lesbian) intergeneration sexual relations; sexual relations involving private and brothel sex workers; secret or open sexual relations involving married individuals, widows, and widowers; "sexual relations involving single unemployed or employed; and sexual relations involving adolescents or young adults may mark different sexual webs"(Timiun, 2012, p.124). The most important indicators of identifying the sexual webs should be the terms guiding the relations, characteristics of the individuals and sexual activities (sexual performance). These and other contextual factors affect intimacy. Also important is whether the sexual webs are open or infinite, closed or finite, exclusive, mixed, positive or negative.

3.6.5 Contraceptive method Choice Variables

Variables are male condom and female condom.

3.6.6 Unsafe sexual practice Variables

Unsafe sexual practice variables may include: unprotected sex (no condom use); inconsistent use of condom; limited unprotected penetration; penetration and then condom use; condom use for ejaculation only; and very importantly, the perception of the respondent of what is unsafe sex. Due to the face to face interviews using the questionnaire, the response rate to all the questions and internal consistency was over 95%.

3.6.7 Definition of Sexual Intimacy and the Spread of HIV (Dependent Variables)

Two perspectives have guided the definition of sexual intimacy in this study: (1) the crux of the message for prevention of HIV infection in Nigeria, and other parts of Africa is that individuals should keep to only one sexual partner, or often use condoms with non-regular partners. This implies individuals should be in sexual exclusivity (one sexual partner); its variant is non- sexual exclusivity (more than one sexual Partner); (2) almost all cases of romantic intimacy leads to sexual intercourse. It can be argued that sexual intercourse can vary by the number of times and the way it is performed. It can also be influenced by variables such as love, pleasure, the desire for children, and so many other variables. Integrating the perspectives, sexual intimacy (dependent variable) is defined as keeping one sexual partner in the past five years whose status is known (positive or negative) and not being aware that he or she is keeping another sexual relationship;

The fourth variable (number of sexual acts) has been subsumed in the period of reference (5years) as explained in the last two paragraphs of this section. Sexual intimacy varies from one partner to another based on their responses to the questions examining sexual intimacy; and it is influenced by capacity, motivation, performance, HIV, and sexual webs variables, while the spread of HIV/AIDS is define as respondents' awareness of one or more individuals who are living with HIV/AIDS or who have died of HIV/AIDS (Partners HIV status will depend on sexual intimacy). Sexual intimacy is further logically divided into six levels reflecting the different responses that might be obtained from the field. This is a case of ordinal dependent variable ordered from 'No intimacy' to 'very high intimacy'. In other words, it is from 'casual sex' to 'sexual exclusivity.'

The variants of sexual intimacy are:

- (1) Keeping one sexual partner in the past five years whose status is known (positive or negative) and not being aware that he or she is keeping another sexual relationship (Very High intimacy)
- (2) Keeping one sexual partner in the past five years whose HIV/AIDS status (positive or negative) is not known and not being aware that he or she is keeping another sexual relationship (High intimacy)
- (3) Keeping more than one sexual partner in the past five years whose HIV/AIDS statuses (positive or negative) are known and not being aware that they are keeping other sexual relationships (moderate intimacy)
- (4) Keeping more than one sexual partner in the past five years whose HIV/AIDS statuses (positive or negative) are not known and not being aware that they are keeping other sexual relationships (moderate intimacy)
- (5) Keeping one sexual partner in the past five years whose HIV/AIDS status (positive or negative) is known and being aware that he or she is keeping another sexual relationship outside the formal union (low intimacy)
- (6) Keeping one sexual partner in the past five years whose HIV/AIDS status (positive or negative) is not known and being aware that he or she is keeping another sexual relationship outside the formal union (low intimacy)
- (7) Keeping more than one sexual partner in the past five years whose HIV/AIDS statuses (positive or negative) are known and being aware that at least one of them is keeping other sexual relationship(s) outside the formal union (very low intimacy)
- (8) Keeping more than one sexual partner in the past five years whose HIV/AIDS statuses (positive or negative) are not known and being aware that at least one of them is keeping other sexual relationship(s) outside the formal union (very low intimacy)
- (9) Keeping only casual relationships in the past five years (no intimacy)

Levels of sexual intimacy: No intimacy =1; Very low intimacy =2; Low intimacy =3; Moderate intimacy =4; High intimacy=5; Very high intimacy =6. (Reference groupvery high intimacy = 6)

The frequency of sexual intercourse as an index of sexual intimacy has been subsumed in the time dimension of five years in which the variable is measured. Studies in African countries such as Lesotho, Tanzania, Togo, Burundi and Cote d'Ivoire have reported mean coital frequency amongst people with regular partners to be 4.0 times and 3.2 times per month for adult men and women respectively (Carael, Cleland, deheneffe, Ferry, & Ingham, 1995); in Mali, Malawi and Burkina Faso, the number of times women have sex in their first year of marriage vary from 4.4 times within a month in Malawi to 3.2 times in Mali and Burkina Faso. The average number of intercourse drops below 3.2 times as the marriage gets older (Brewis & Meyer, 2005). If an average of one (1) sexual intercourse acts per month amongst the respondents is assumed, they would have had 60 in five years; if a higher average of two times per month is assumed, they would have had 120 sexual acts in five years period. Given the number of sexual acts possible within the period of five years as described above, I submit that the variableness of sexual intercourse among the respondents would have no effect on the inference drawn with respect to levels of intimacy.

3.6. 8 Independent Variables

The variables that influence sexual intimacy, unsafe sexual behaviours and the spread of HIV/AIDS are the independent variables. These variables are classified broadly into individual, family and community variables. The variables are measured using nominal, ordinal and interval scales. Thus the quantitative data contain nominal, ordinal and interval variables.

The variables measured using nominal scales are residence, sex, marital status, occupation, religion, type of family, family support, types of sexual relationship, condom usage and breakage. Others are alcohol and drug usage; keeping secret relationships; HIV status and vulnerability to HIV infection; partners support and type of respondents' religious organisation.

While the ordinal variables are all sexual motivation variables; influence of drinking joints; influence of hotels; influence of pornography; level of educational attainment; satisfaction with relationship and participation in religious activity's variables . Finally, the interval variables are age and income.

The data for this study is both quantitative and qualitative in nature. The structured questionnaire was used for the collection of quantitative data while a Tape recorder was used to record interviews for later transcription and analysis. Both data was concerned with the contextual factors influencing unsafe sexual behaviour and the spread of HIV/AIDs and STIs among the Tiv people of central Nigeria. As earlier mentioned in section 3.2, the qualitative data would afford us a deeper insight into some of the issues contained in the quantitative data.

3.7.1 Models of Statistical Analysis

The Ordinal Regression which is an extension of the Generalized Logit Model is used to model the dependence of a polytomous ordinal response on a set of predictors (factors or covariate) as proposed by McCullagh (1980).

A typical form of the Ordinal Regression proposed here for the analysis of quantitative data is as shown below:

"Suppose that the k ordered categories of the dependent variable (e.g. levels of intimacy) have probabilities $p_1(x)$, $p_2(x)$, ..., $p_k(x)$ when the covariates (e.g. levels of education etc.) have value x. let Y be the dependent variable (e.g. levels of intimacy) which takes values in the range 1...., k with associated probabilities as indicated above, and let k_j (x) be the odd that $Y \leq j$ given covariate values (e.g. levels of education etc.) x. then,

$$k_{j}(\mathbf{x}) = k_{j} \exp(-\beta^{T} \mathbf{x})$$
 (1 ≤ $j < k$), (equation 3.1)

Where β is a vector of unknown parameters; the ratio of corresponding odds

$$k_{j}(\mathbf{x}1)/k_{j}(\mathbf{x}2) = \exp \{\beta^{T}(\mathbf{x}2 - \mathbf{x}1)\} \quad (1 \le j < k) \quad (\text{equation 3.2})$$

Is the independence of j and depends only on the difference between the covariate values, $x^2 - x^2$. Since the odds for the event $Y \leq j$ is the ratio $\gamma_j(x) / \{1 - \gamma_j(x)\}$, where $\gamma_j(x) = p_1(x), p_2(x), \dots, p_k(x)$ the proportional odd is made identical to the linear logistic model $\log [\gamma_j(x) / \{1 - \gamma_j(x)\}] = \theta_j - \beta^T x$ $(1 \leq j < k)$ (equation 3.3) $\theta_j = \log k$

With $\theta_j = \log k_j$, so that the difference between corresponding cumulative $\log its$ is independent of the category involved".

Statistical Product and Service Solution (SPSS) version 21 which has provision for the Generalised Linear Regression with Cumulative logit Link was used for the analysis of quantitative data. Heck, Thomas, and Tabata (2012) have provided a good discussion of multilevel modelling of categorical variables using IMB SPSS.

Specifically, with a categorical outcome that is not strictly ordered, the summary of the multinomial logistic regression model (level1) can be written as

$$\pi c = \frac{exp^{(\beta o + x'\beta)}}{1 + exp^{(\beta o + x'\beta)}}$$

Where $\times'\beta$ represent a vector of predictors and their corresponding regression coefficient. This can be extended to level 2 as

$$\operatorname{ncij} = \log(\pi_{cij}/\pi_{Cij}) = \beta_{oj(c)+} \sum_{q=1}^{0} \beta_{qjc} X_{qij}$$

This links the expected values of the outcome to the predicted values η cij. The underlying continuous variable η cij is a ratio of two odds (the probability of each category c versus the selected category C that is explained by a set of linear combination of (X) predictors (q = 1...Q).

Whereas the univariate distributions was used to examine the distributions of responses by each of the sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables at the individual level; the bivariate distributions was used to examine sex differentials by response on each of the sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. The bivariate distributions were also used for the examination of sexual intimacy (partner variable) by sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. Furthermore, the bivariate distributions was used for the examination of sexual webs HIV status (partner variable) by sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. Furthermore, the bivariate distributions was used for the examination of sexual webs HIV status (partner variable) by sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables (see de Vaus, 2014 on univariate and bivariate distributions)

3.8 Schema for quantitative Data Analysis

(See Appendix F, P.332)

3.9 Analysis of Qualitative data

The data collected with the aid of an audio device was played and transcribed. The responses of each of the individuals were carefully taken note of, and the entire data was systematically organized and reported. The data provided insight into some of the issues observed in the quantitative data.

3.10 Ethical Issues

Application for Ethics clearance was sent to ACU HREC, and Ethics approval with registration number 2013 233V was given in March, 2014, and has been renewed annually (see Appendix H, p. 335). The researcher has adhered completely to the ethical provisions of both the University and other regulatory bodies (Nigeria) involved in overseeing research conducted with human beings. The ethics approval from ACU was sustained in Nigeria. The research was conducted with integrity noting its responsibilities to all stakeholders.

3.11 Limitations of the Study

The sample for this study (1,621 respondents including sample for in-depth interviews) was drawn from four locations which are unique entities (not representative sample of urban and rural settlements in Nigeria); thus, the examination of the variation of sexual intimacy amongst partners was within, and not between, the locations. However, this is not a limitation that has any effect on the findings, but an acknowledgement of the possibilities of conducting between the locations analysis, if the locations were drawn from, and been representative sample of the population of locations. An understanding of the variations in sexual intimacy between regions would require a national study involving many States in the regions. Such a study would need to obtain a representative sample of rural or urban areas in order to examine sexual intimacy amongst partners within the settlements and between the local councils where these settlements are found.

CHAPTER FOUR

UNIVARIATE (DESCRIPTIVE) ANALYSIS OF BACKGROUND VARIABLES OF THE RESPONDENTS AND OTHER KEY VARIABLES

4.1 Introduction

The focus of this chapter is to provide background information of the respondents that are germane to the understanding of the discussions that would ensue from the field study. The information will cover demographics, socio-economic characteristics and other key variables. The quantitative data emanating from the field study consist of information on 1601 respondents examined on 71 variables covering sexual behaviour and the spread of HIV/AIDS. The respondents are from both rural (796; 49.7%) and urban areas (805; 50.3%). 749 (46.8%) of them are males while 852 (53.2%) are females. The individuals who are HIV positive constitute 50.3% (805) while 49.7% (795) are HIV negative. All the respondents have heard of HIV/AIDS pandemics, and are aware (1,173; 73.3%) that HIV/AIDS is contracted through unprotected sex with an infected person, yet, 317 (19.8%) had never ever used condoms during intercourse, though 1,312 (81.9%) are keeping more than one sexual partner.

The univariate analysis will be presented under sub-themes. These sub-themes consist of a group of variables that are empirical indicators of concepts in the study. The sub-themes are: Sexual capacity, Sexual motivation, Sexual performance, HIV/AIDS variables; and Sexual webs variables.

4.2 Sexual Capacity Variables

Sexual capacity variables comprise of individual (demographics and socio-economic) variables, family and structural variables.

4.2.1 Demographics and Socio-economic Characteristics of Respondents

Information is provided on the respondents by residence, location of residence, age, sex, and family types that the respondents have come from (demographics). Regarding socioeconomic variables, information is provided on level of education, occupation, monthly income, religious organisation, regular attendance of religious activities and whether the respondent is a religious leader; other variables are primary partner's level of education and main occupation; and whether the respondents receive support from family members. Out of 1,601 sample units in the present study, 50.3% of them are urban inhabitants while 49.7% are rural dwellers. The sample approximates the national trend in terms of the urban and rural dwellers divide in Nigeria (see Table 4.1)

Table 4.1

Distribution of Respondents by Residence

Residence	Frequency	Percentage
Urban	805	50.3
Rural	796	49.7
Total	1601	100

Note. The source is from field survey, 2014

The distribution of respondents by location of residence indicates that 411 (25.7%) are from Gboko (urban-Ipusu), while 394 (24.6%) are from Aliade (urban-Ichongu). The others, 396(24.7%) are from Jovkyundan (rural- Ipusu) and 400 (25.0%) are from Udei (rural-Ichongu, see Table 4.2 below).

Table 4.2

Distribution of Respondents by Location of Residence

Location of Residence	Frequency	Percentage
Urban-Ipusu	411	25.7
Urban-Ichongu	394	24.6
Rural-Ipusu	396	24.7
Rural-Ichongu	400	25.0
Total	1601	100

Note. The source of the data is from field survey, 2014

Nigeria has a young population which is typical of countries with high fertility rates. The country has fertility rate of 5.5%; 46 percent of the population are under the age of 15 years, while 50% are between the ages of 15 and 64 years. Only 4% of the population are above 64 years of age (NDHS, 2013). Most of the respondents in this study, 1,488 (92.9%) are between the reproductive ages of 18 and 49 years, while 133 (7.1%) are above the age of 50 years. The young people are more sexually active and more exposed to the risk of HIV/AIDS; thus, they constitute a higher percentage of respondents in the present study (see Table 4.3)

Table 4.3

Age	Frequency	Percentage	
18-19yrs	163	10.2	
20-24yrs	293	18.3	
25-29yrs	342	21.4	
30-34yrs	336	21.0	
35-39yrs	120	7.5	
40-44yrs	136	8.5	
45-49yrs	98	6.1	
50-54yrs	67	4.2	
55-59yrs	35	2.2	
60+	11	0.7	
Total	1601	100	

Distribution of Respondents by Age (Years)

Note. The source of the data is from field survey, 2014

The distribution of the population of Nigeria by sex indicates that there are 69,086,302 females representing 49.2% of the population while there are 71,345,488 males (50.2%). In Benue State, the percentage ratio of the sexes in the population is 49.6% is to 50.4% for females and males respectively (NPC, 2010). Amongst the respondents, there are 805 females (53.2%) and 749 males (46.8%). There is slightly a higher numbers of females in the sample because, it's assumed that having more women may provide opportunities to obtain information on intricate patterns of sexual behaviour. The culture allows men to have more than one wife (more than one sexual partner), but does not allow the same for women (See Table 4.4 for the distribution of the respondents by sex).

Table 4.4

Distribution of Respondents by Sex

Sex	Frequency	Percentage	
Male	749	46.8	
Female	852	53.2	
Total	1601	100	

Note. The source of the data is from field survey, 2014.

There are generally high levels of illiteracy amongst the population. For instance, 40% of women and 30% of men have no formal schooling. The figure is further higher for women (54%) and men (40%) in the rural areas. The regional percentages of no formal education are 38% and 22.6% for women and men respectively (NDHS, 2013). Amongst the respondents, 7.6% have not obtained formal education, while 11.7% have completed only primary education. The percentage of completion of secondary education seems to be high (47.5%) because all respondents who have completed some form of secondary education (the junior

secondary school) are in this category. The respondents who have completed some form of higher education (Diploma, Higher Diploma, First degree, Postgraduate) are 530 (33.1%). (See Table 4.5 for the distribution of the respondents by educational attainment).

Table 4.5

Levels of Educational Attainments of the Respondents

Level of Education	Frequency	Percentage
No formal schooling	122	7.6
Primary	188	11.7
Secondary	761	47.5
Tertiary	530	33.1
Total	1601	100

Note. The source of the data is from field survey, 2014

The respondents have also provided information on primary partners' educational attainment; 137 (8.6%) partners have no formal schooling; 209(13.1%) have completed primary education while 759 (47.4 %) have completed some forms of secondary education (Junior or Senior Secondary). Four hundred and ninety six (31.0%) partners have attained tertiary education (See Table 4.6).

Table 4.6

Level of Education	Frequency	Percentage
No formal schooling	137	8.6
Primary	209	13.1
Secondary	759	47.4
Tertiary	496	31.0
Total	1601	100

Levels of Primary Partners' Educational Attainments

Note. The source of the data is from field survey, 2014

The unemployment rate in Nigeria is about 38% for women and 21% for the men. Women are more likely to be engaged in sales and services sectors (61.0%). Women with five or more children (22.0%) and primary education (29.0%) are more likely to work in agriculture (NDHS, 2013). The share of women in wage employment in non-agricultural sectors is 14.0 percent (UNDP, 2013). Amongst the respondents, 451 (28.2%) are engaged in farming, 363(22.7%) are in business, while 175 (10.9%) are unemployed and 366 (22.9%) are students. Those in civil service are only 203 (12.7%). The unemployment rate reported here is only 10.9% because some individuals who would have reported been unemployed, choose to report either farming or business (what they are temporary doing rather than not doing

anything) even though they are not fully engaged in these sectors. Some individuals don't want to be seen as doing nothing by reporting unemployment status (see Table 4.7 for the distribution of respondents' main occupation).

Table 4.7

Occupation Frequency Percentage 451 28.2 Farming Civil service 203 12.7 **Business** 363 22.7 Student 366 22.9 175 10.9 Unemployed 2.7 Others 43 Total 1601 100

The Distribution of Respondents by Main Occupation

Note. The source of the date is from survey, 2014

The information on primary partner's main occupation indicate that 468 (29.2%) are into farming; 393 (24.5%) are into business, 253 (15.8%) are civil servants, while 168 (10.5%) are unemployed and 290 (18.1%) are students. Others include artisans and mechanics (29; 1.8%). (See Table 4.8).

Table 4.8

Occupation	Frequency	Percentage
Farming	468	29.2
Civil service	253	15.8
Business	393	24.5
Student	290	18.1
Unemployed	168	10.5
Others	29	1.8
Total	1601	100

Distribution of Respondents by Primary Partner Main Occupation

Note: The source of the data is from field survey, 2014

UNDP (2013) reported that 61.2% of the population in Nigeria are living on less than 1 USD per day. Similarly, the NDHS (2013) report on income and standard of living indicates that 81.0% of uneducated women, and 71.0% of uneducated men belong to the poorest homes in Nigeria. Majority of the respondents, 1,186 (74.1%) earn less than twenty five thousand naira (AUD 168.91) a month, while few others, 30(1.9%) earn more than one hundred thousand naira (AUD 675.67) a month. As shown in Table 4.6, most of the respondents are engaged in low income earning ventures such as subsistence farming and petty businesses (see Table 4.7 for the distribution of respondents by income).

Income	Frequency	Percentage	
Less than 25,000	1186	74.1	
25,000-49,000	287	17.9	
50,000-90,000	98	6.1	
100,000+	30	1.9	
Total	1601	100	

Distribution of Respondents by Monthly (Naira)

Note. The source of data is from field survey, 2014. (AUD1=N148)

In terms of religious affiliation, the north eastern and north western regions of Nigeria are predominantly Muslims, while the north central and southern regions are mostly Christians. Benue State is in the north central region and its inhabitants are predominantly Christians. One thousand, five hundred and three (93.9%) of the respondents are Christians, 70 (4.4%) are traditional religionists while 24 (1.5%) are Muslims (see Table 4.10)

Table 4.10

Distribution of Respondents by Religious Affiliation

Religion	Frequency	Percentage
Christianity	1503	93.9
Islam	24	1.5
Traditional Religion	70	4.4
Others	4	0.2
Total	1601	100

Note. The source of the data is from field survey, 2014

Apart from the respondents being Christians or Muslims, they have provided further information on their religious organizations. Eight hundred and seventy nine (54.9%) are Catholics, 459 (28.7%) are Protestants, while 165 (10.3%) are Pentecostals. Others are Muslims (24; 1.5%) and Traditional religionists (70 (4.4%; see table 4.11)

Table 4.11

Distribution of Respondents by Religious Organisation

Organisation	Frequency	Percentage
Catholic	879	54.9
Protestant	459	28.7
Pentecostal	165	10.3
Islam	24	1.5
Traditional religion	70	4.4
Others	4	0.2
Total	1601	100

Note. The source of data is from field survey, 2014.

The respondents were asked whether they have held a leader position in their religious organisation. Eight hundred and eighty nine (55.5%) have not held a leadership position, while among those who have agreed to hold leadership position, only 145 (9.1%) have expressed strong affirmation of their leadership position in their religious organisation (see Table 4.12).

Table 4.12

Distribution of Respondent by whether	• he or she is an Off	fficial of Religious	Organisation
---------------------------------------	-----------------------	----------------------	--------------

Official	Frequency	Percentage	
Strongly disagree	180	11.2	
Disagree	709	44.3	
Agree	567	35.4	
Strongly agree	145	9.1	
Total	1601	100	

Note. The source of data is from field survey, 2014

Regarding the issue of regular attendance of religious activities, only 225 (14.1%) asserted that they attend their religious activities regularly. 519 (32.4%) said they don't attend the activities of their religious organisation regularly (see Table 4.13).

Table 4.13

Distribution of Respondents by Regular Attendance of Religious Organisation Activities

Regular Attendance	Frequency	Percentage
Strongly disagree	104	6.5
Disagree	415	25.9
Agree	857	53.5
Strongly agree	225	14.1
Total	1601	100

Note. The source of the data is from field survey, 2014

4.2.2 Family Variables

Marriage is a universal event in Nigeria. The rate of those single or never married declines sharply from 70.4% amongst the ages between 15 and 19 years old to 0.7% amongst those ages 45 and 49 years (NDHS, 2013). The same report reveals that amongst those who are married, 33% of women are in polygamous relationship while for their male counterpart, the rate is 17%. The types of family the respondents have come from are monogamous (760; 47.5%), polygamous (757; 47.3%), and single families (82; 5.1%). Others have reported that they are from divorced families (see Table 4.14)

Types of family	Frequency	Percentage	
Monogamous	760	47.5	
Polygamous	757	47.3	
Single	82	5.1	
Others	2	0.1	
Total	1601	100	

Distribution of Respondents by Types of Family they have come from

Note. The source of the data is from field survey, 2014

Some of the respondents have reported that they receive support from family members; 745 (46.5%) received money only; 237 (14.8%) received materials only, while 77(4.8%) received both material and money. Five hundred and forty two (33.9%) did not receive support from their family members (see Table 4.15).

Table 4.15

Distribution of Respondents by Types of Support they receive from Family Members

Type of support	Frequency	Percentage
Money	731	45.7
Material	237	14.8
Both	77	4.8
No support	556	34.7
Total	1601	100

Note. The source of the data is from field survey, 2014

4.2.3 Structural Variables

The respondents were asked to react to the assertion that some recreational facilities such as hotels, Nollywood films (films produced by Nigerian film industry) and drinking joints influence illicit sex (sex outside regular sexual relationships). Majority of the respondents, 1,268 (79.2%) have agreed that watching Nollywood firms with pornographic scenes influence illicit sex, while 333 (20.8%) have disagreed with the assertion (see Table 4.16).

Table 4.16

Distribution of Respondents by whether Nollywood Firms Influence Illicit Sex

Response	Frequency	Percentage	
Strongly disagree	81	5.1	
Disagree	252	15.7	
Agree	781	48.8	
Strongly agree	487	30.4	
Total	1601	100	

Note. The source of the data is field survey, 2014

Similarly, 1,385 (86.6%) of the respondents have agreed that Hotels provide accommodation where illicit sex takes place while 216 (13.4%) disagreed with the view (see Table 4.17).

Table 4.17

Distribution of Respondents by whether Hotels' Accommodation Influences Illicit Sex

	Frequency	Percentage	
Strongly disagree	60	3.7	
Disagree	156	9.7	
Agree	849	53.0	
Strongly agree	536	33.6	
Total	1601	100	

Note. The source of data is from field survey, 2014

Majority of the respondents, 1,383 (89.4%) also have affirmed that drinking joints are good source where people initiate illicit sex, while 218 (13.6%) have disagreed with the statement (see Table 4.18).

Table 4.18

Distribution of Respondents by whether Drinking Joints Influence Illicit Sex

Response	Frequency	Percentage
Strongly disagree	54	3.4
Disagree	164	10.2
Agree	806	53.4
Strongly agree	577	36.0
Total	1601	100

Note. The source of data is from field survey, 2014

The respondents have also reported on the type of laws that govern their sexual relationship. Seven hundred and eighty (48.7%) rely on the religious laws; 568 (35.5%) on customary laws, while 27 (1.7%) depend on the court laws. Others said they believe in what pleases them in their relationships rather than any laws (226; 14.1%). It is worthy to note that there are customary Courts that enforce the customary laws, while the religious organisations enforce the religious laws. Partners who are not satisfied with the resolutions of the religious organisations, resort to the courts as the last arbiter, but not without sanction from the organisations (see Table 4.19).

Regular Attendance	Frequency	Percentage
Religious laws	780	48.7
Customary laws	568	35.5
Court Laws	27	1.7
Others	226	14.1
Total	1601	100

Distribution of Respondents by Type of Laws Guiding their Sexual Relationships

Note. The source of data is from field survey, 201

4.3 Motivation Variables

There are reasons that provide impetus for sexual relationships amongst the respondents. Some have reported love (1,426; 89.0%) as reason for sexual relationship. Others have identified the desire for children (1,166; 72.8%), pleasure (1,027; 64.1%), money (639; 39.9%), place to live (551; 34.4%) and favours (801; 50%) as motivations for entering into sexual relationships (see Tables 4. 20 and 4.21a and b).

Table 4.20

Distribution of Respondents by Motivations for Sexual Relationship (Love)

Response	Frequency	Percentage
Strongly disagree	57	3.6
Disagree	118	7.4
Agree	982	61.3
Strongly agree	444	27.7
Total	1601	100

Note. The source of data is from field survey, 2014

Table 4.21a

Distribution of respondents by Motivations for Sexual Relationship (Desire for Children,

Response	Frequency	Percentage
	Desire for Children	
Strongly disagree	100	6.2
Disagree	335	20.9
Agree	722	45.1
Strongly agree	444	27.7
Total	1601	100
	Desire for Pleasure	
Strongly disagree	136	8.5
Disagree	438	27.4
Agree	666	41.6
Strongly agree	361	22.5
Total	1601	100
	Need Money	
Strongly disagree	291	18.2
Disagree	671	41.9
Agree	512	32.0
Strongly agree	127	7.9
Total	1601	1000

Pleasure, and Need Money)

Note. The source of the data is from field survey, 2014.

Table 4.21b

Distribution of respondents by Motivations for Sexual Relationship (Place to Live, and

Favours)

Response	Frequency	Percentage
	Place to Live	
Strongly disagree	331	20.7
Disagree	719	44.9
Agree	442	27.6
Strongly disagree	109	6.8
Total	1601	100
	Desire for Favours	
Strongly disagree	301	18.1
Disagree	499	31.0
Agree	639	39.9
Strongly agree	162	10.1
Total	1601	1000

Note. The source of the data is from field survey, 2014.

Motivations for having a sexual relationship is a variable with multiple responses; Tables 4. 22 and 4.23 show the combined motivation factors of love, need money and desire for children; and pleasure, place to live, and favours respectively. The combined two factors of 'love and would like children', and three factors of 'love, need money, and would like children' are more likely to motivate sexual relationships (611; 38.2% vs 430; 26.9%).

Distribution of Respondents by Combined Motivations of Love, Need Money and Desire

Children for Sexual Relationship

Combined motivations	Frequency	Percentage
Either love, need money or like child	385	24.0
Like child and need money	73	4.6
Love and need money	102	6.4
Love and like child	611	38.2
Love and need money and like child	430	26.9
Total	1601	100

Note. The source of the data is from field survey, 2014

Table4.23

Distribution of Respondents Combined Motivations of Pleasure, Place to live and Favours

for Sexual Relationship

Combined motivations	Frequency	Percentage
Either pleasure, place to live or favours	842	52.6
Place to live and favours	109	6.8
Pleasure and place to live	93	5.8
Pleasure and favours	244	15.2
Pleasure and place to live and favours	313	19.6
Total	1601	100

Note. The source of the data is from field survey, 2014

Those who were influenced by all the factors of love, need money, would like children, place to live, pleasure and favour to engage into sexual relationship are 167 (10.4%). (See Table 4.24).

Distribution of Respondents by Combined motivations of love, Need Money, desire Children,

Combined motivate	Frequency	Percentage
Love, money, place and favours	3	0.2
Children, money, place and favours	11	0.7
Love, children, place and favour	31	1.9
Children, money, pleasure and place	4	0.3
Love, money and pleasure and place	9	0.6
Love, children and pleasure and place	38	2.4
Children, money, pleasure and favours	9	0.6
Love, money, pleasure and favours	103	6.5
Love, money, pleasure and favours	16	1.0
Love, money, children, place and favours	47	2.9
Love, money, children, pleasure and place	32	2.0
Love, money, children, pleasure, favours	66	4.1
Children, money, pleasure, place and favours	18	1.1
Love, money, pleasure, place and favours	15	0.9
Love, children, pleasure, place and favours	79	4.9
Love, money, children, pleasure, place and favours	167	10.4
Either one, two or three motivations (Tables4.22 & 4.23)	953	59.6
Total	1601	100

Note. The source of the data is from field survey, 2014

As earlier indicated, Nigeria has a high fertility rate of 5.5% and as it can be seen in the above discussion, the desire for children motivates sexual relationships. Seven hundred and sixty two (47.6%) individuals have no child with their primary partner, 263 (16.4%) have one child, 290 (18.1%) have two children, while 286 (17.8%) have either 3 or more children with their primary partner. The primary partner is the first wife. She is accorded certain privileges over the other wives. The culture allows the man to marry a second wife if the first (primary) partner is barren. If the man has children with the second or third partner and not with the primary partner, she (primary partner) would loss certain privileges from the husband to the other wives or partners via their children (see Table 4.25 for number of children)

Table 4.25

Distribution of Respondents by Number of Children with Primary Partner

Number of children	Frequency	Percentage
No child	762	47.6
One child	263	16.4
Two children	290	18.1
Three or more children	286	17.9
Total	1601	100

Note. The source of data is from field survey, 2014

Table 4.26 shows the number of children some of the respondents have with other partners rather than the primary partner; 904 (56.5%) have no child with other partner(s), 139 (8.7%) have one child, 119 (7.4%) have two children, while 114 (7.1%) have either three or more children. Others have indicated that they have not been keeping other sexual relationships.

Table 4.26

Distribution of Respondents by Number of Children with other Partner(s)

Number of children	Frequency	Percentage
No child	925	70.5
One child	149	11.4
Two children	124	9.5
Three or more children	114	8.7
Total	1601	100

Note. The source of the data is from field survey, 2014

The issue of looking for money to satisfy certain needs has already been identified as one of the reasons some of the respondents engage in sexual relationship. In reaction to the inquiry on whether they receive support from their sexual partners, 1126 (70.3%) respondents said they have been receiving support in form of money or material from their partners, while 475 (29.7%) reported that they have not been supported by their partners (see Table 4.27).

Table 4.27

Distribution of Respondents by whether they Receive Assistance from Partner

Assistance	Frequency	Percentage	
Yes	1126	70.3	
No	475	29.7	
Total	1601	100	

Note. The source of data is from field survey, 2014

4.4 Sexual Performance Variables

Under this sub-theme, information is provided on one's relationship status, number of sexual partners, and the use of condoms, alcohol and drugs in sexual relationships.

It has already been stated that marriage is almost universal in Nigeria. The rate of those who are single declines sharply from 70.4% amongst ages 15 and 19 years to 0.7% amongst those aged between 45 and 49 years (NDHS, 2013). Eight hundred and twenty (51.2%) of the individuals, slightly more than half of the total respondents are in marital relationships, while the rest, 781 (48.8%) are single, just with variations in social circumstances of death of a

partner (widowed), divorced, separated and not officially married according to the tradition (cohabiting; see Table 4.28).

Table 4.28

Distribution of	f Res	pondents i	by	Sexual	Relationshi	ip	Status of	of	the	Res	pond	lents
			~					•			4	

Relationship Status	Frequency	Percentage
Married	820	51.2
Single	527	32.9
Widowed	123	7.7
Divorced	59	3.7
Separated	65	4.1
Cohabiting	7	0.4
Total	1601	100

Note. The source of data is from field survey, 2014

The types of sexual relationships kept by the respondents are heterosexuality (1,566; 97.8%), bisexuality (29; 1.8%), lesbianism (2; 0.1%) and homosexuality (4; 0.2%). Same sex relationship has been outlawed in Nigeria. Thus, it may be that people are afraid to identify themselves as gay due to the attendant consequences of stigmatisation and prosecution. The dearth of studies focusing on the same sex relationship makes it difficult to estimate the extent of the practice in Nigeria (see Table 4.29 for the distribution of types of sexual relationship).

Table 4.29

Types of Sexual Relationship Respondents Keep

Type of Relationship	Frequency	Percentage	
Heterosexual	1566	97.8	
Bisexual	29	1.8	
Lesbian	2	0.1	
Homosexual	4	0.2	
Total	1601	100	

Note. The source of data is from field survey, 2014

The duration of the sexual relationships kept by the respondents was measured within the last five years preceding the study. Some of the respondents, 334 (20.9%) have stayed in their sexual relationships for less than one year at the time of the interview, some have stayed for over one year but less than 5 years (692; 43.2%), while those who have stayed for over 5 years in their relationships are 39.9% (575; see Table 4.30).

Age of Relationship	Frequency	Percentage	
Less than 1yr	334	20.9	
Over 1yr but less than 5	692	43.2	
Over 5yrs	575	35.9	
Total	1601	100	

Distribution of respondents by Age of Sexual Relationships (Years)

Note. The source of data is from field survey, 2014

In Nigeria, 33% of women and 17% of men in marital relationships live in polygamous unions. The percentage is higher in other places peaking at Zamfara State (53%; NDHS, 2013). One hundred and forty two (16.7%) of the women in this study have reported that their partners (men) are keeping only one wife, while 590 (69.2%) have reported that their partners (men) are keeping two wives. One hundred and one (14.1%) have reported that their partners are keeping more than two wives. The dwelling places are usually large with several apartments, where the women live with their children under the control of the head of the family (man). The Christian organisations have less influence on those who have not been converted; and for those who were converted after marrying several wives were allowed to keep such marriages. Though the church exercises caution in giving such people leadership roles. In case of the Muslims, they are allowed to marry four wives (see Table 4.31 for the number of wives kept by men).

Table 4.31

Distribution of Respondents by Number of Wives Kept by the Men, (as Reported by Women)

Number of wives	Frequency	Percentage
One	142	16.7
Two	590	69.2
More than two	120	14.1
Total	852	100

Note. The source of data is from field survey, 2014. The total is 852 instead of 1602 because the men were excluded from answering the question.

Despite the fact that some men officially keep more than one sexual partner, both the men and women alike have expressed their knowledge of the "secret" sexual relationships kept by their partners. Three hundred and sixty one (42.4%) of women were aware that their male partner(s) are keeping secret sexual relationships, while 264 (35.2%) of the men were aware that their female partner(s) are keeping secret sexual relationships. The secret relationships are uncovered when the suspecting partner employ the services of some willing friends, relations, colleagues, and others to keep an eye on the unfaithful partner. Due to the large network of informants, the unsuspecting partner would sometimes engage in the unwholesome behaviour in the presence or knowledge of an informant. Sometimes, members of the community who are hurt by the behaviour of the unfaithful partner will report the act, even when the other is not suspicious. The communities largely live communal lives and hold regular meetings for development at the level of the lineage, kindred, clan, district, and ethnic nationalities (see Table 4.32 for the secret sexual relationships keep by partners).

Table 4.32

Knowledge	Frequency	Percentage	
	Men		
Aware	264(35.2%)	16.5	
Not aware	485(64.8%)	30.3	
	Womer	1	
Aware	361(42.4%)	22.5	
Not aware	491(57.6%)	30.7	

Distribution of Respondents by Knowledge of Secret Sexual Relationships Kept by Partners

Note. The source of the data is from field survey, 2014

Beside the number of children with other partners, the report from the respondents shows that 289 (18.1%) of them have only one sexual partner, 903 (56.4%) have two sexual partners, while 717 (25.5%) individuals are keeping three sexual partners. The number of sexual partners here includes both the secret and official ones (see Table 4.33)

Table 4.33

Distribution of Respondents by Number of Sexual Partners

Number	Frequency	Percentage	
One	289	18.1	
Two	903	56.4	
Three	717	25.5	
Total	1601	100	

Note. The source of data is from field survey, 2014

Responding to the question of whether they had ever used condoms before, 1284 (80.2%) of the respondents said they had ever used condoms, while 317 (19.8%) had never ever used condoms during intercourse (see Table 4.34).

Response	Frequency	Percentage	
Yes	1284	80.2	
No	317	19.8	
Total	1601	100	

Distribution of Respondents by Ever used Condoms during Sexual Intercourse

Note. The source of data is from field survey, 2014

The type of condoms used by the respondents are male condoms (1278; 99.5%) and female condoms (6; 0.5%; see Table 4.35)

Table 4.35

Distribution of Respondents by Types of Condoms they use

Condoms type	Frequency	Percentage	
Male	1278	99.5	
Female	6	0.5	
Total	1284	100	

Note. The source of data is from field survey, 2014. The total is less than 1601 because not all respondents are condoms users.

The common brand of condoms used by the respondents is Gold circle (1026; 79.9%) while some used Rough Rider (123; 9.6%), Lifestyle (44; 3.4%), Fantasy (40 (3.1%) and others (51; 4.0%; see Table 4.36).

Table 4.36

Distribution of Respondents by Condoms Brand they use

Brand	Frequency	Percentage
Gold circle	1026	79.9
Rough rider	123	9.6
Lifestyle	44	3.4
Fantasy	40	3.1
Others	51	4.0
Total	1284	100

Note. The source of data is from field survey, 2014. The total is less than 1601 because not all respondents are condom users

The respondents gave the reasons for the choice of condoms brand, they are availability (529; 50.1%), quality (326; 30.9%), pleasure (110; 10.4%), being cheap (61; 5.8%) and others (30; 2.8%; see Table 4.37)

Brand	Frequency	Percentage	
Availability	529	50.1	
Cheap	61	5.8	
Pleasure	110	10.4	
Quality	326	30.9	
Others	30	2.8	
Total	1056	100	

Reasons for Choice of Condoms Brand used by Sexual Partners

Note. The source of data is from field survey, 2014. The total is less than 1601 because not all respondents are condoms

They also responded to the issue of condoms failure. Seven hundred and eight (44.2%) respondents have reported condoms breakage, while 399 (24.4%) have reported slip off. The high rate of condoms breakage could be as a result of expired or low quality condoms, or improper ways of using it, while condoms slip off is linked to improper usage (see Table 4.38).

Table 4.38

Distribution of Respondents by Condoms Failure during Usage

	Frequency	Percentage
	Condoms Breakage	
Yes	708	44.2
No	576	36.0
Never used Condoms	317	19.8
Total	1601	100
	Condoms Slip-Off	
Yes	399	24.9
No	885	55.3
Never used Condoms	317	19.8
Total	1601	100

Note. The source of data is from field survey, 2014

The rate of condoms usage amongst individuals with more than one sexual partner in Nigeria is 29% amongst women and 20% amongst the men (NDHS, 2013). Amongst the respondents, 78 (4.9%) did not use condoms during intercourse in the last six months preceding the study; 920 (57.5%) used condoms sometimes and 286 (17.9%) used condoms always (see Table 4.39)

Usage	Frequency	Percentage	
Did not use	78	4.9	
Used sometimes	920	57.5	
Used always	286	17.9	
Never used	317	19.8	
Total	1601	100	

Respondents' Usage of Condoms in the Last Six Months Preceding the Study

Note. The source of data is from field survey, 2014

The desire for children (570; 35.6%), and for pleasure (392; 24.5%) are the common reasons given by respondents why they did not use condoms during intercourse. Other reasons such as "condoms cause pains, irritation, and awful odour; don't like it, my partner don't like it", were also given by the respondents for not using condom (134; 8.4%; see Table 4.40)

Table 4.40

Distribution of Respondents by Reasons for not using Condoms

Reasons	Frequency	Percentage
Don't know where to get it	67	4.2
Expensive	28	1.7
Reduces pleasure	392	24.5
Generally scarce	55	3.4
Need child	570	35.6
Not needed or heard	355	22.2
Others	134	8.4
Total	1601	100

Note. The source of data is from field survey, 2014

Some of the respondents consume alcohol (620; 38.7%) and had also engaged in sexual intercourse while drunk (386; 24.1%; see Tables 4.41).

Table 4.41

Drink Alcohol	Frequency	Percentage
	Alcohol Consumption	
Yes	620	38.7
No	981	61.3
Total	1601	100
	Had Sex while Drunk	
Yes	386	24.1
No	234	14.6
Never used alcohol	981	61.3
Total	1601	100

Distribution of Respondents by Alcohol Consumption and had Sex while Drunk

Note. The source of data is from field, survey,

Ogogoro is a local gin derived from bananas or stale palm wine. It is sold in small quantities such as in small glasses, and bottles. It is very cheap. Half a litre of Ogogoro can go for \$1 USD. It is affordable and friends buy it for others. Burukutuu is brewed from corn, millet and other cereals while palm wine is obtained from the palm tree. Both drinks are cheap and taken by even people of high social class. Two hundred and ninety two (18.2%) respondents take beer, 109 (6.8%) drink palm wine, 88 (5.5%) drink burukutuu while 71(4.4%) drink Ogogoro. Two hundred and sixty (46.1%) of the respondents, drink three times or more within a week (see Tables 4.42 and 4.43).

Table 4.42

Distrib	ution of	Respond	lents by	Type o	f Al	cohol	Consumed
			-		,		

Reasons	Frequency	Percentage
Ogogoro	71	4.4
Burukutuu	88	5.5
Beer	292	18.2
Palm wine	109	6.8
Others	60	3.7
Never used Alcohol	981	61.3
Total	1601	100

Note. The source of data is from field survey, 2014

Table 4.43

Distribution of Respondents by Number of Times they drink in a Week

Number of times	Frequency	Percentage
One time	167	10.4
Two times	193	12.1
Three times	142	7.4
More than three times	118	38.7
Never used Alcohol	981	61.3
Total	1601	100

Note. The source of data is from field survey, 2014

Some of the respondents have reported that they take drugs (70; 4.4%) and out of those that take drugs, 53 (75.7%) had sex while they had taken the drugs (see Tables 4.44).

Take Drugs	Frequency	Percentage
	Drugs Usage	
Yes	70	4.4
No	1531	95.6
Total	1601	100
	Had Sex while taken Drugs	3
Yes	53	3.3
No	17	1.1
Don't use drugs	1531	96.0

Distribution of Respondents by Drug Usage and had Sex while taken Drugs

Note. The source of data is from field survey, 2014

The types of drugs taken by the respondents are traditional mixture (49; 70.0%), cannabis (13; 18.6%) and solution (7; 10.0%; see Table 4.45).

Table 4.45

Distribution of Respondents by Types of Drug they take.

Drug type	Frequency	Percentage
Solution	7	10.0
Cannabis	13	18.6
Traditional Mixture	49	70.0
Others	1	1.4
Total	70	100

Note. The source of data is from field survey, 2014. The total is less 1601 because the question is for only drug users.

4.5 HIV/AIDS Variables

In Nigeria, 96% of men and 93% of women are aware of HIV/AIDS (NDHS, 2013). All the respondents in this study have heard of HIV/AIDS (*Danzaria* or *Anakande* in the local dialect). Trying to examine their knowledge of HIV/AIDS and whether it is real to them, the question asked was whether the respondents knew anyone with HIV. 1504 (93.9%) knew someone with HIV/AIDS while 97 (6.1%) did not. Communal ways of living makes it easy for people to know a member of the family or lineage who is down with an ailment including HIV/AIDS (see Table 4.46 for knowledge of someone with HIV.

Distribution of Respondents by Knowledge of someone living with HIV

Knowledge	Frequency	Percentage	
Yes	1504	93.9	
No	97	6.1	
Total	1601	100	

Note. The source of data is from field survey, 2014

The individuals known to the respondents as living with HIV/AIDS are mostly friends (563; 35.2%), husband or wife (189; 11.8%), sister (219; 13.7%) and brother (176; 11.0%). Others are parents (38; 2.4%) and children (27; 1.7%; see Table 4.47)

Table 4.47

Relationship of Respondents with someone living with HIV/AIDS

Relationship	Frequency	Percentage
Husband/Wife	189	11.8
Brother	176	11.0
Sister	219	13.7
Friend	563	35.2
Parents	38	2.4
Children	27	1.7
Others	292	18.2
Don't know	97	6.1
Total	1601	100

Note. The source of data is from field survey, 2014

Eight hundred and five (50.3%) respondents are living with HIV/AIDS while 796(49.7\%) are

HIV negative (see Table 4.48)

Table 4.48

Distribution of Respondents by HIV Status

Status	Frequency	Percentage
Positive	805	50.3
Negative	796	49.7
Total	1601	100

Note. The source of data is from field survey, 2014

Regarding the knowledge of partners HIV status, 75.4% (1207) of the respondents have said that they know their partner(s) HIV status while 24.6% (394) don't know (see Table 4.49)
Table 4.49

Distribution of Respondents by K	nowledge of Partners(s) HIV Status
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Knowledge	Frequency	Percentage
Yes	1207	75.4
No	394	24.6
Total	1601	100

Note. The source of data is from field survey, 2014

Between 2009 and 2013, 12,178,964 individuals have tested for HIV and received HIV counselling in Nigeria; out of the number, those who tested for HIV between 2012 and 2013 were 4,077,663 (33.5%; NACA, 2014). Amongst the respondents, those who tested for HIV in the last six months preceding the interview were 805 (50.3%). The figure includes those who are HIV positive but wanted to know their viral load (see Table 4.50).

Table 4.50

Distribution of Respondent by Test for HIV in the last Six Months Preceding Interviews

Test	Frequency	Percentage	
Yes	807	50.4	
No	794	49.6	
Total	1601	100	

Note. The source of data is from field survey, 2014

Some of the respondents have shown a dislike for HIV. Seven hundred and thirty seven (92.6%) respondents who were HIV negative said they "will feel bad if infected with HIV" (see Table 4.51).

Table 4.51

Distribution of Respondents by whether they will feel bad if infected with HIV

Response	Frequency	Percentage
Strongly disagree	30	3.8
Disagree	29	3.6
Agree	307	38.6
Strongly agree	430	54.0
Total	796	100

Note. The source of data is from field survey, 2014. The total is less 1601 because the question is for only those who are HIV sero-negative.

Eighty five percent of men and 78% of women in Nigeria know that HIV is contracted through having unprotected sex with someone who is infected with HIV (NDHS, 2013). Amongst the respondents, 1173 (73.3%) have said they know that HIV is spread through

unprotected intercourse with infected person; while 172 (10.7%) respondents said they don't know the means through which HIV is contracted (see Table 4.52).

Table 4.52

Distribution of Respondents by Knowledge of main source of Spread of HIV

Source	Frequency	Percentage
Unprotected casual sex	1173	73.3
Blood transfusion	139	8.7
Sharing syringes or needles	80	5.0
Others	37	2.3
Don't know	172	10.7
Total	1601	100

Note. The source of data is from field survey, 2014

Five hundred and twenty one (32.5%) respondents have reported that their partner(s) is HIV positive. Whereas 686 (42.8%) of them stated that their partner(s) is HIV negative, 394 (24.6%) respondents don't know their partner (s) HIV status (see Table 4.53).

Table 4.53

Distribution of Respondents by Knowledge of Sexual Partner HIV Status

Status	Frequency	Percentage	
Positive	521	32.5	
Negative	686	42.8	
Don't know	394	24.6	
Total	1601	100	

Note. The source of data is from field survey, 2014

The majority of the respondents are aware that several people have been infected with HIV in the communities (1,481; 92.6%; see Table 4.54)

Table 4.54

Distribution of Respondents by Knowledge of whether several People are infected with HIV

Response	Frequency	Percentage
Strongly disagree	26	1.6
Disagree	94	5.9
Agree	764	47.7
Strongly agree	717	44.8
Total	1601	100

Note. The source of data is from field survey, 2014

By the year 2013; 2, 224, 857 individuals who were living with HIV have been placed on Anti-retroviral Drug (ART; NACA, 2014). All the respondents in the study who are living with HIV were placed on the ART at the time of the interviews. Some have taken ART for

over one but less than 3 years (291; 36.1%), some for over three but less than 5 years (206; 25.6%), while 149 (18.5%) have been taking ART for over 5 years at the time of the interview (see Table 4.55)

Table 4.55

Period	Frequency	Percentage
Less than one year	159	19.8
One to less than 3years	291	36.1
Three to less than 5 years	206	25.6
5years +	149	18.5
Total	805	100

Period of time Respondents with HIV have collected HIV Drug

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for only those living with HIV.

4.6 Sexual Webs Variables

Regarding whether the respondents were satisfied or not with their current primary sexual relationship, 272 (17.0%) of them have said they are not quite satisfied with the relationship, while 935 (58.4%) have reported that they are satisfied with the relationship, 302 (18.9%) individuals stated that they are highly satisfied with their current relationship. Those who expressed dissatisfaction with relationship are ninety two (5.7%; see Table 4.56).

Table 4.56

Distribution of Respondents by Satisfaction with Current Sexual Relationship

Satisfaction	Frequency	Percentage	
Not satisfied	92	5.7	
Somewhat satisfied	272	17.0	
Satisfied	935	58.4	
Highly satisfied	302	18.9	
Total	1601	100	

Note. The source of data is from field survey, 2014

Sexual webs HIV Status is a variable that combines the respondents HIV Status and the Partner (s) HIV status irrespective of whether the respondents knows his or her partner's HIV status. Thus, the sexual webs that one partner is negative but does not know his or her partner's status is refers to as Negative/don't know; hence there are Negative/Don't know relations (266; 16.6%); both negative relationships (525; 32.8%); Positive/don't know relationships (128; 8.0%); Positive/Negative relationships (166; 10.4%) and Both positive relationships (516; 32.2%). Given that a sexual web can be 2 partners or more, both positive

is same as all positive. Similarly, if only one partner is HIV negative out of a sexual web of three partners, it can be refer to as Negative/positive relationship (see Table 4.57)

Table 4.57

HIV Status	Frequency	Percentage
Negative/Don't know	266	16.6
Both Negative	525	32.8
Positive/Don't know	128	8.0
Positive/Negative	166	10.4
Both Positive	516	32.2
Total	1601	100

Distribution of Respondents by Sexual webs HIV Status

Note. The source of data is from field survey, 2014

Based on the number of sexual partners the respondents have kept within the last five years before the interviews, knowledge of their partners' HIV status, knowledge of whether or not their partner(s) is/ are keeping secret sexual relationships; all the respondents have been ranked from No intimacy to Very high intimacy. The level with the highest percentage is Moderate intimacy (827; 51.7%) and the one with the lowest percentage is High intimacy (43; 2.7%; see Table 4.58).

Table 4.58

	Frequency	Percentage	
No intimacy	267	16.7	
Very low intimacy	244	15.2	
Low intimacy	114	7.1	
Moderate intimacy	827	51.7	
High intimacy	43	2.7	
Very high intimacy	106	6.6	
Total	1601	100	

Distribution of Respondents by Levels of Sexual Intimacy

Note. The source of data is from field survey, 2014.

4.7 Summary

The univariate (descriptive) analysis of sexual capacity (demographics, socio-economic, family and structural) variables, sexual motivations variables, sexual performance variables, HIV, and sexual webs variables provides background information in terms of percentage distribution of respondents by these variables, and the social context that generate them. The distributions of these variables in the study approximate the regional and national patterns where information is available. The information provided in this chapter sets the stage for understanding of further analysis such as sex and HIV status differential by variables; and the

relationships that exist between the independent (sexual capacity, sexual motivation, sexual performance, HIV) and the dependent (Sexual intimacy, and spread of HIV)variables.

CHAPTER FIVE

SEX DIFFERENTIALS BY SEXUAL CAPACITY, SEXUAL MOTIVATION, SEXUAL PERFORMANCE, HIV, AND SEXUAL WEBS VARIABLES

5.1 Introduction

Information has been provided on the social context and distribution of respondents by sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables in Chapter Four. All the hypotheses stated in this study would be tested using multivariate analysis in chapter eight. However, preliminary analysis of bivariate relationship between the variable of sex (male, female) and other variables will be carried out in this chapter, to ascertain whether the correlations and significance levels between sex and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables really exist or are as a result of sampling error. The direction of association will not be of much interest here since that will be done in chapter eight under multivariate analysis and test of hypotheses. This chapter will help with information for the control of variables during test of hypotheses.

The null hypothesis examining bivariate relationship assumes that there is no correlation between the two variables (for instance X and Y). In other words, the correlation between the two variables X and Y is zero (0). But correlation is hardly exactly zero. Some correlation values that deviate from zero may be due to sampling error, while some may be due to the existence of association between the two variables in the sample, and by extension to the population; a position assumed by the alternative hypothesis.

At 0.05 level of significance, the variables of age (0.000), respondents' educational attainment (0.000), partners' education (0.000), respondents' income (0.000), religious affiliation (0.000), respondents' occupation (0.001), religious organisations (0.000), types of family support (0.000), the desire for money (0.000), the desire for children (0.01), the need for place to live (0.000), and the desire for favours (0.05) have a significant correlation (not equal to zero) with sex which concords with the position assumed by the alternative hypothesis, which states that there is an association between sex and the independent variables. However, the variables of residence (0.72), location of residence (0.14), leadership in religious organisation (0.13), primary partners' occupation (0.93), types of families (0.98); desire for pleasure (0.27) and love (0.71) have a correlation with sex that deviate from zero, but it is not significant, and thus could be attributed to sampling error. The strength of the association between sex and the independent variables varies from 0.01 to 0.63 (not strong to

moderately strong). Tables 5.1, 5.2, and 5.3 show the correlations and significant levels between sex and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. The distributions of these independent variables by sex have been discussed below, and the numerous relevant tables are presented in Appendix A5.

5.2 Sex Differentials by Sexual Capacity Variables

Sex differentials will be examined by individual (demographics, socio-economic) variables, family, and structural variables.

5.2.1 Demographics and Socio-economic Variables

Amongst the respondents, the women are younger than the men. There are more women than men in the first three age groups below 35 years (11.5% vs 8.7%; 21.7% vs 14.4%; and 23.7% vs 18.7%) while the men predominate in all the older age groups above 35 years except age group 45-49years (see Table A5.3, Appendix A5). By residence, there are more women than men in urban (50.7% vs 49.8%); while there are more men than women in rural (50.2% vs 49.39%) areas. However, by individual locations, there are more women than the men in rural-Ipusu (26.6% vs 22.6%), while there are more men the women in urban-Ichongu (25.4% vs 23.9%; see Tables A5.1 and A5.2, Appendix A5 for the distribution of sex by age, by location of residence and by residence).

With regard to educational attainment, there are more women than the men who have not attained any levels of formal education (8.1% vs 7.1%) and the women are less likely to attain Tertiary education than the men (27.8% vs 39.1%). While the distribution of partners' educational attainment by sex shows that the men are more likely to have partners who have no formal schooling (10.7% vs 6.7%) and less likely than the women to have partners who have attained tertiary education (20.8% vs 39.9%; see Table A5.4, Appendix A5).

By income, the women earn less than the men. There are more women in the lowest income group than the men (79.7% vs 67.7%), while the men predominate in all the three higher income groups (21.1% vs 15.1%; 8.3% vs 4.2%; 2.9% vs 0.9%; see Table A5.5, Appendix A5). Religious wise, the women are more likely than the men to be Christians (96.2% vs 91.2%) while the men are more likely to be Muslims (1.9% vs 1.2%) and Traditional religionists (6.7% vs 2.3%; see Table A5.5, Appendix A5). Furthermore on religion, the women are slightly more likely to be officials in their religious organisation than the men (4.6% vs 4.4%), and more likely to regularly attend the activities of their religious

organisations (14.7 % vs 13.4%; see Table A5.7, appendix A5); the women are also more likely to be Catholic (57.3% vs 52.2%), Protestant (29.0% vs 28.3%), except Pentecostal (10.7% vs 10.0%) than the men.

In terms of occupation, the women are predominantly in agriculture (31.6% vs 24.3%), in business (25.1% vs 19.9%), and as student (25.0% vs 20.4%); while more men than women are in the civil service (16.7% vs 9.2%) and other occupations (artisan, mechanic; 5.1% vs 0.6%). The distribution of primary partners' occupation by sex indicates that the men are more likely to have partners who are engaged in agriculture (33.6% vs 25.4%) and less likely to have partners who are civil servants (7.5% vs 23.1%). While, the women are more likely to have partners who are unemployed (10.6% vs 10.4%) and other occupations (artisan, mechanics, 2.8% vs 0.7%) than the men (see Table A5.6, Appendix A5)

5.2.2 Family Variables

With regard to the family the respondents have come from, the men are more likely to come from monogamous (47.5% vs 47.4%) and other families (divorced, Separated 0.3% vs 0.0%) than the women, while the women are more likely to come from polygamous (47.4% vs 47.1%) and single (5.2% vs 5.1%) families than the men. Similarly, women are more likely to be supported with money (50.6% vs 40.1%), material things (16.0% vs 13.5%) and less likely not to be supported at all (29.6% vs 40.6%) than the men (see Table A5.9, Appendix A5).

5.3 Sex Differentials by Motivation Variables

Men and women alike are propelled by reasons into sexual relationships. The women are more likely than men to go into sexual relationships due to love (62.9% vs 59.5%), money (40.7 % vs 22.0%); pleasure (44.2% vs 38.6%); place to live (31.6% vs 23.1%; see), and favours (43.1% vs 36.3%), while the men are more likely to be influenced by the desire to have children than the women (30.3% vs 25.5%; see Tables A5.10 and 11, Appendix A5) It is interesting to note that when the motivations of love, need money and would like to have children are combined, women are more likely than the men to be influenced by money and the desire to have children (5.8% vs 3.2%); love and money (8.7% vs 3.7%); love, money and the desire to have children (32.6% vs 20.3%), while the men are more likely than the women to be influenced by love and the desire to have children (44.9% vs 32.3%; see Table A5.12, Appendix A5). Furthermore, women are more likely to be influenced into sexual relationship

by the combined motivations of pleasure, place to live and favours than the men (21.7% vs 17.1%; see Table A5.13, Appendix A5).

With regard to assistance (money, material or both), the women are more likely to be assisted by their partners than the men (87.2% vs 51.1%); while the men are less likely to be assisted by their partners (48.9% vs 12.8%; see Table A5.14, Appendix A5). Whereas the women are less likely to have children with other partners (71.3% vs 69.7%), the men are more likely to have more than three children with other partners than the women (11.1% vs 6.4%; see Table A5.15, Appendix A5). While the men are more likely than women to stay without their partner for only a short period of less than 3 months (59.0% vs 50.4%), the women are more likely to stay without their partner for a longer period of over 1 year than the men (6.6 vs 6.0%; see Table A5.16, Appendix A5)

5.4 Sex Differentials by Sexual Performance Variables

Regarding sexual relationship status, the men are more likely than the women to be married (55.7% vs 47.3%), and to be single (35.2% vs 30.9%); while the women are more likely than the men to be widowed (11.6% vs 3.2%), divorced (5.0% vs 2.1%), and separated (4.7% vs 3.3%; see Table A5. 17, Appendix A5). By types of sexual relationship, the women are more heterosexual than the men (98.5% vs 97.1%), while the men are more bisexual than the women (2.4% vs 1.3%; see Table A5.18, Appendix A5). Furthermore, the women are more likely to keep either one (20.8% vs 15.0%) or two sexual partners (58.2% vs 54.3%) than the men, while the men are more likely to keep more than two sexual partners than the women (30.7% vs 21.0%; see Table A5.19, Appendix A5). More men had ever used condoms in their life time than women (84.1% vs 76.8%; see Table A5.20, Appendix A5)

With regard to brand, the men are more inclined to use Gold circle brand of condoms (80.2% vs 79.7%) and Rough rider (10.5% vs 8.7%) than the women, while the women are more inclined to use Lifestyle (3.5% vs 3.3%) and Fantasy (3.5% vs 2.7%; see Table A5.21, Appendix A5). Furthermore, there are reasons for choice of condoms, the men are more likely to cite availability (50.6% vs 49.6%), pleasure (10.7% vs 10.1%), and quality (32.0% vs 29.8%) for choice of condoms , while the women are more likely to cite being cheap as reason for choice of condoms brand than the men (5.9% vs 5.6%; see Table A5.22, Appendix, A5). Furthermore, on failure to use condoms, women are more likely to cite reduction of sexual pleasure (26.9% vs 21.8%), and condoms being expensive (1.8% vs 1.7%) as reasons for failure to use condoms, while the men are more likely to cite scarcity

(4.3% vs 2.7%) and the desire for children (35.9% vs 35.3%) as reasons for failure to use condoms during intercourse (see Table A5.25, Appendix A5). By condoms usage in last six months preceding the studies, more women had never used condoms (23.2% vs 15.9%), and are less likely to use condom always than men (16.3% vs 19.6%; see Table A5.24, Appendix A5). Furthermore on condoms failure, the men are more likely to experience condoms breakage (47.4% vs 41.4%) and slip off (28.3% vs 21.9%) than the women (see Table A5.23, Appendix A5)

More men than women take alcohol (49.7% vs 29.1%) and engage in sex while drunk (31.2% vs 17.8%; see Tables A5. 26 and 27, Appendix A5). Similarly, men are more likely than women to consume Ogogoro (6.5% vs 2.6%), Burukutuu (7.7% vs 3.5%), and Beer (22.2% vs 14.8%); while the women are more likely to consume palm wine than the men (7.0% vs 6.5%). Whereas the women are more likely than men to drink once in a week (35.7% vs 21.0%), the men are more likely to drink more than three times in a week than the women (24.3% vs 11.2%; see Table A5.28 and 29, Appendix A5).

Men and women alike take drugs. However, the men are more likely to take drugs (5.7% vs 3.2%) and engage in sex while they have taken drugs (76.7% vs 74.1%; see Table A5.30, Appendix A5). Furthermore, the men are more likely than the women to take Solution (14.0% vs 3.7%), and Cannabis (20.9% vs 14.8%), while the women are more likely to take Traditional mixture than the men (81.5% vs 62.8%; see Tables A5.31, Appendix A5)

5.5 Sex Differentials by HIV Variables

With the knowledge of HIV issues, both the men and women identified correctly some sources of the spread of HIV/AIDS. The men are more likely to identify unprotected casual sex (76.1% vs 70.8%) as source of HIV infection, while the women are more likely to identify blood transfusion (10.0% vs 7.2%), and sharing of contaminated Syringes or Needles (5.4% vs 4.5%) as sources of the spread of HIV/AIDS than men (see Table A5.32, Appendix A5). Women are more likely to test for HIV than the men (56.9% vs 43.0%; see Table A5.33, Appendix A5).

5.6 Sex Differentials by Sexual Webs Variables

The men are less likely to keep a very high intimate sexual relationship than the women (8.1% vs 4.9%; see Table A5.35, Appendix A5). Similarly, men are more likely not to be

satisfied (6.1% vs 5.4%) and less likely to be highly satisfied (19.2% vs 18.4%) with a sexual relationship than the women (see Table A5.34, Appendix A5).

5.7 Summary

The analysis of sex differential by sexual capacity, sexual motivation, sexual performance, HIV and sexual webs variables has provided information on the apparent differences between the sexes. The women in the sample are less educated than the men and more likely to work in agricultural sector with low income. They are more religious and more likely to be motivated by the combined effects of love, the need for money and the desire to have children to engage in relationships, while the men are more likely to be influenced by love and the desire to have children.

The men are more inclined to drink alcohol, take drugs and engage in sex with low usage of condoms than the women. They are less likely to test for HIV and less satisfied with sexual relationships and keep more sexual partners than the women.

Not all variables examined in the bivariate analysis have significant association with sex. Some of the variables such as residence (0.72), location of residence (0.14), leadership in religious organisation (0.13), primary partners' occupation (0.93), types of families (0.98); desire for pleasure (0.27) and love (0.71) are not significantly associated with sex. In pages 96, 97 and 98, Tables 5.1, 5.2, and 5.3, list all correlations and significant levels of the bivariate relationships).

The respondents, irrespective of sex differentials are in sexual relationships. This sets the stage for the bivariate analysis of the HIV status of the sexual relationships, hereafter referred to as sexual webs HIV status, and sexual capacity, sexual motivation, sexual performance, HIV, and other sexual webs variables.

Table 5.1

Correlations and Significance Levels between Sex and Sexual Capacity, and Motivation Variables

Table	Variables	2	X		Y			
	Sex (x) by y	N of categories	levels of measurement (dichotomous)	N of categories	Levels of measurement	Coefficient	Correlation	Significant level
A5.1	Residence	2	Nominal	2	Nominal	Phi	-0.01	0.72
A5.2	Location of residence	2	Nominal	4	Ordinal	Gamma	-0.06	0.14
A5.3	Age	2	Nominal	10	Ordinal	Gamma	-0.23	0.000
A5.4	Respondents' education	2	Nominal	4	Ordinal	Gamma	-0.20	0.000
A5.4	Partners' education	2	Nominal	4	Ordinal	Gamma	0.32	0.000
A5.5	Income	2	Nominal	4	Ordinal	Gamma	-0.30	0.000
A5.5	Religious affiliation	2	Nominal	4	Ordinal	Gamma	-0.42	0.000
A5.5	Leader in religious organisation	2	Nominal	4	Ordinal	Gamma	-0.06	0.13
A5.6	Respondents occupation	2	Nominal	6	Ordinal	Gamma	-0.11	0.001
A5.6	Primary Partners' occupation	2	Nominal	6	Ordinal	Gamma	-0.01	0.93
A5.7	Regular attendance of Religious activities	2	Nominal	4	Ordinal	Gamma	0.05	0.24
A5.8	Religious organisation	2	Nominal	6	Ordinal	Gamma	-0.12	0.001
A5.9	Types of families	2	Nominal	4	Ordinal	Gamma	0.01	0.98
A5.9	Types of family support	2	Nominal	4	Ordinal	Gamma	-0.20	0.000
A5.10	Need money	2	Nominal	4	Ordinal	Gamma	0.33	0.000
A5.10	Desire children	2	Nominal	4	Ordinal	Gamma	-0.10	0.01
A5.10	Desire pleasure	2	Nominal	4	Ordinal	Gamma	-0.44	0.27
A5.10	Place to live	2	Nominal	4	Ordinal	Gamma	0.17	0.000

Note. Source data is from Field Survey, 2014

Table 5.2

Table	Variables	2	X		Y			
	Sex (x) by y	N of	levels of	N of	Levels of	Coefficient	Correlation	Significant
		categories	(dichotomous)	categories	measurement			level
A5.11	Desire favours	2	Nominal	4	Ordinal	Gamma	0.08	0.05
A5.11	Love	2	Nominal	4	Ordinal	Gamma	-0.02	0.71
A5.12	Combined love, money, & children	2	Nominal	5	Ordinal	Gamma	0.15	0.000
A5.13	Combined pleasure, place to live & favours	2	Nominal	5	Ordinal	Gamma	0.15	0.000
A5.14	Partners' assistance	2	Nominal	2	Nominal (dichotomous)	Phi	-0.39	0.000
A5.15	Number of children with other partners	2	Nominal	4	Ordinal	Gamma	-0.63	0.25
A5.16	Duration without partner	2	Nominal	5	Ordinal	Gamma	0.14	0.001
A5.17	Relationship status	2	Nominal	6	Ordinal	Gamma	0.21	0.000
A5.18	Types of sexual relationship	2	Nominal	4	Ordinal	Gamma	-0.32	0.05
A5.19	Number of sexual partners	2	Nominal	3	Ordinal	Gamma	-0.21	0.000
A5.20	Ever used condoms	2	Nominal	2	Nominal (dichotomous)	Phi	0.09	0.000
A5.21	Brand of condoms	2	Nominal	5	Ordinal	Gamma	0.03	0.67
A5.22	Choice of condoms	2	Nominal	5	Ordinal	Gamma	0.04	0.48
A5.23	Condoms breakage	2	Nominal	3	Ordinal	Gamma	0.14	0.001
A5.23	Condoms slip off	2	Nominal	3	Ordinal	Gamma	0.18	0.000

Correlations and Significance Levels between Sex, Motivation, and Performance Variables

Note. Source data is from Field Survey, 2014

Table 5.3

Table	Variables	2	X		Y			
	Sex (x) by y	N of	levels of	N of	Levels of	Coefficient	Correlation	Significant
		categories	(dichotomous)	categories	measurement			level
A5.24	Used condoms last six months	2	Nominal	4	Ordinal	Gamma	0.10	0.02
A5.25	Reasons for not using condoms	2	Nominal	7	Ordinal	Gamma	-0.07	0.05
A5.26	Alcohol consumption	2	Nominal	2	Nominal (dichotomous)	Phi	0.21	0.000
A5.27	Sex while drunk	2	Nominal	3	Ordinal	Gamma	0.36	0.000
A5.28	Types of alcohol	2	Nominal	6	Ordinal	Gamma	0.35	0.000
A5.29	Number of times drink in a week	2	Nominal	4	Ordinal	Gamma	-0.29	0.000
A5.30	Drugs usage	2	Nominal	2	Nominal (dichotomous)	Phi	0.06	0.01
A5.30	Drugs for sex	2	Nominal	2	Nominal (dichomous)	Phi	0.03	0.80
A5.31	Types of drugs	2	Nominal	4	Ordinal	Gamma	0.11	0.03
A5.32	Knowledge of source of spread of HIV	2	Nominal	5	Ordinal	Gamma	0.11	0.02
A5.33	Test for HIV last six months	2	Nominal	2	Nominal	Phi	-0.14	0.000
A5.34	Satisfaction with primary relationship	2	Nominal	4	Ordinal	Gamma	-0.03	0.55
A5.35	Sexual intimacy	2	Nominal	6	Ordinal	Gamma	-0.09	0.01

Correlations and Significance Levels between Sex, Performance, and HIV Variables

Note. Source data is from Field Survey, 2014

CHAPTER SIX

BIVARIATE ANALYSIS OF SEXUAL WEBS HIV STATUS AND SEXUAL CAPACITY, SEXUAL MOTIVATION, SEXUAL PERFORMANCE, AND HIV VARIABLES

6.1 Introduction

The univariate and sex differentials analysis in the previous chapters (4 and 5) are at the individual level. This chapter will further the analysis of the data by examining the bivariate relationship between the sexual webs HIV status (a composite variable at partners' level) and the sexual capacity, sexual motivation, sexual performance and HIV variables. The sexual webs HIV status variable is derived from the combination of the respondents HIV status and, his or her partner(s) HIV status (see Appendix C for HIV by individual characteristics). The two individuals or more forming the sexual relationship constitute a web. Some individuals know their HIV Status and that of their partner(s) while some don't. Thus, the sexual webs HIV status variable has five categories: Positive/don't know, Positive/Negative; Positive/Positive (Both positive); Negative/don't know; and Negative/Negative (Both negative).

All the hypotheses stated in this study would be tested using multivariate analysis in chapter eight. However, preliminary analysis of bivariate relationship between the variable of sexual web HIV status and other variables will be carried out in this chapter, to ascertain whether the correlations and significance levels between sexual web HIV status and sexual capacity, sexual motivation, sexual performance, and sexual webs variables really exist or are as a result of sampling error. The direction of association will not be of much interest here since that will be done in chapter eight under multivariate analysis and test of hypotheses. This chapter will help with information for the control of variables during test of hypotheses.

Following the procedure in chapter 5, under section 5.1; the bivariate correlation analysis between sexual webs HIV status and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables will be examined. The null hypothesis assumes that there is no correlation between two variables (for instance X and Y). In other words, the correlation between the two variables X and Y is zero (0). But correlation is hardly exactly zero. Some correlation values that deviate from zero may be due to sampling error, while some may be due to the existence of association between the two variables in question within the sample, and by extension to the population; a position assumed by the alternative hypothesis.

At 0.05 level of significance, the variables of age (0.000), relationship status (0.000) respondents' income (0.000), leadership in religious organisation (0.001), respondents' occupation (0.001), religious organisations (0.000), types of family support (0.000), Nollywood influence on illicit sex (0.000) the desire for children (0.000), the need for place to live (0.000), condoms breakage (0.000), condoms slip off (0.000), sex while drunk (0.000), and number of wives (0.000) have a significant correlation (not equal to zero) with sexual webs HIV status that concords with the position assumed by the alternative hypothesis, which presume that there is an association between sexual webs HIV status and the independent variables. However, the variables of sex (0.44), respondents' education (0.20), religious affiliation (0.90), hotel influence on illicit sex (0.33), types of family (0.98); need money (0.43), and drinking places (0.94) have a correlation with sexual webs HIV status that deviate from zero, but it is not significant, and could be attributed to sampling error. The strength of the association between sex and the independent variables varies from 0.01 to 0.28. Tables 6.1; 6.2; and 63 show the correlations and significant levels between sex and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. The distributions of sexual webs HIV status by these independent variables have been discussed in the following sections.

6.2 Sexual Webs HIV Status and Sexual capacity Variables

The distribution of sexual webs HIV status by demographics, socio-economic, family and structural variables, will be explored in this section.

6.2.1 Sexual Webs HIV Status, and Demographics and Socio-economic variables

An exploration of the distribution of sexual webs HIV status by sex indicates that only 35.1% men and 29.7% women are keeping "complete positive sexual webs" (Both HIV positive) relationships (see Table A6.1, Appendix A6). By age, the older age groups above 55 years are more likely to keep complete positive sexual webs (54%) while the younger age groups below 25 years are more likely to keep complete negative sexual webs (35%; 38.2% see Table A6.2, Appendix A6). With regard to sexual relationship status, the married (40.4%) and the separated (38.5%) are more likely to keep complete positive sexual webs relationships. While the single are more likely to be in complete negative sexual webs (both negative, 34.5%; see Table A6.3, Appendix A6). Similarly, by respondents' educational

attainment, those with primary education are more likely to be in complete positive sexual webs relationship (36.2% see Table A6.4, Appendix A6), while those with tertiary education are more likely to keep complete negative sexual webs. By respondents' occupation, the civil servants (43.8%) and others (artisan, mechanics, 46.5%), are more likely to be in complete positive sexual webs; while the unemployed (44.6%) are more likely to keep complete negative sexual webs (40.2%; see Table A6.5, Appendix A6).

Furthermore, the distribution of leadership in religious organisations and regular attendance of religious activities indicate that, those who agreed that they are leaders are more likely to keep complete positive sexual webs (39.0%), while those who are not (disagreed) leaders are more likely to keep complete negative sexual webs. In relation to religious activities, those who strongly disagreed that they attend activities regularly (50.0%)are most likely to keep complete positive sexual webs, while those who have disagreed that they attend activities regularly, are more likely to keep complete negative sexual webs (36.4%; see Table A6.6, Appendix A6). By Income, those earning above One hundred thousand naira per month are more likely to keep a complete positive sexual web (46.7%) while those earning between Fifty and ninety nine thousand naira are more likely to keep complete negative sexual webs (40.8%; see Table A6.7, Appendix A6). Whereas the Traditional religionists are more likely to keep complete positive sexual webs (38.6%), the Muslims are more likely to keep complete negative sexual webs (37. 5%; see Table A6.7, Appendix A6). Belonging to a religious organisation shows that those affiliated to the Pentecostal organisation (40.6%) are more likely to have complete positive sexual relationship, while the Muslims (37.5%) are more likely to keep complete negative sexual relationship (see Table A6.8, Appendix A6).

6.2.2 Sexual Webs HIV Status and Family Variables

The distribution of family types which the respondents have come from shows that those who have come from single families are more likely to keep complete positive sexual webs (45.1%), while those from monogamous family type are more likely to keep complete negative sexual webs (38%). Similarly, those who received both money and material support, and those who don't receive support (37%) from family members are more likely to keep complete positive sexual webs, while those who receive money only are more likely to keep complete negative sexual webs (38.0%; see Table A6.9, Appendix A6)

6.2.3 Sexual Webs HIV Status and Structural Variables

The distributions of sexual webs HIV status by structural variables, laws guiding sexual relationships, Nollywood films' (films produced by Nigerian movie industry) influence on illicit sex, drinking joints, and Hotels influence on illicit sex have also been observed. Those who have reported that their relationships are guided by customary laws, are more likely to keep complete positive sexual webs (34.7%), while those who said their relationships are guided by court laws are more likely to be in complete negative sexual webs (37%; see Table A6.11, Appendix A6).

Similarly, those who have agreed that Nollywood firms influence illicit sex are more likely to have complete positive sexual webs (35.1%), while those who have disagreed that Nollywood firms influence illicit sex are more likely to have complete negative sexual webs (43.7%). Furthermore, those who have disagreed that drinking joints influence illicit sex are more likely to keep complete positive sexual webs (37.2%), while those who have agreed that drinking joints influence illicit sex are more likely to have complete negative sexual webs (35.5%; see Table A6.10, Appendix A6). Further still, those who have strongly disagreed that Hotels influence illicit sex are more likely to engage in complete positive sexual webs (38.3%) while those who have disagreed are more likely to have complete negative webs (40.4%; see Tables A6.11, Appendix A6)

6.3 Sexual webs HIV Status and Motivation Variables

The distribution of sexual webs HIV status by motivation variables: love, need money, would like to have children; pleasure, place to live, and favours indicates that those who have agreed that love motivated their sexual relationship (36.6%) are more likely to keep complete positive sexual relationship, while those who have disagreed that love motivated their relationship are more likely to be in complete negative sexual webs (40.4%). Also, those who have accepted that the desire for money motivated sexual relationships (36.1%) are more likely to keep complete positive sexual webs. While those who have strongly agreed that the desires for money motivated relationships are more likely to keep complete negative sexual webs (37.0%; see Table A6.12a, Appendix A6)

Furthermore, those who have accepted that the desire for children motivated sexual relationships (41.5%) are more likely to be in complete positive sexual webs; while those who have strongly agreed that they were motivated for sexual relationship by the desire for children are likely to keep complete negative sexual webs (43.2%; see Table A6.12b,

Appendix A6). Regarding pleasure, those who strongly disagreed that pleasure motivated their sexual relationships (40.0%) are more likely to be in complete positive webs, while those who have strongly agreed the pleasure was responsible for their relationships are more likely to keep complete negative webs (47.6%; see Table A6.12b, Appendix A6).

Further still, those who have accepted that the desire for a place to live influenced their sexual relationships (43.9%) are more likely to be in complete positive sexual webs, while those who have disagreed (39.9%) are more inclined to be engaged in complete negative sexual relationships. Again, those who have accepted that favours motivated their sexual relationships (35.7%) are more likely to keep complete positive sexual webs, while those who have strongly agreed (43.8%) are more likely to be in complete negative webs (see Table A6.13, Appendix A6)

Further examination of the motivation variables shows that individuals who are motivated to engage in sexual relationship by combined factors of love, money and child (39.1%) are more likely to be in complete positive sexual webs while those motivated by love and the desire for children are more likely to keep complete negative webs (34.5%; see Table A6.14, Appendix A6). In similar way, those in relationship due to pleasure, place, and favours are more likely to keep complete positive webs (42.2%) while those in relationship due to pleasure and favour are more likely to be in complete negative webs (48.0%). (See Table A6.15, Appendix A6). Those with more than 2 children with other partners are more likely to be in complete negative sexual relationships (48.0%; see Table A6.16, Appendix A6)

6.4 Sexual Webs HIV Status and Sexual Performance Variables

The distribution of sexual webs HIV status by number of sexual partners, and types of sexual relationship shows that those with two sexual partners (37.4%) are more likely to be in complete positive webs, while those with one partner are more likely to keep complete negative sexual webs (45.7%). Bisexual relationships are more likely to be in complete positive webs (37.9%), while heterosexual relationships are more likely to be in complete negative webs (33%; see Tables A6.17 and 18, Appendix A6).

With regard to the variables: choice of brand of condoms, and reasons for the choice brand; those using lifestyle are more likely to be in complete positive sexual webs (38.6%), while those using Rough Rider are more likely to be in complete negative sexual webs

(46.3%; see Table A6.19, Appendix A6). Whereas those who have chosen brand of condoms due to quality (34.7%) are more likely to be in complete positive sexual webs, those who have chosen brand due to being cheap are more likely to be in complete negative webs (57.4%; see Table A6.20, Appendix A6)

Furthermore on condom utilisation-condoms breakage and slip off, those who experienced breakage (34.9%) and slip off (45.1%) are more likely to be in complete positive sexual webs (see Tables A6.21, Appendix A6). In similar way, those who irregularly used condoms within the last six months preceding interviews (34.0%) are more likely to keep complete positive sexual webs, while those who did not use condoms (35.9%) are more likely to be in complete negative sexual webs. Furthermore, those who did not use condoms (43.7%) because they were not in need or had never used it, are more likely to be in complete positive sexual webs, while those who did not use condoms because they don't know where to get one (47.85), are more likely to be in complete negative sexual webs (see Tables A6.22 and 23, Appendix A6).

As it is the case with some of the other variables already discussed, those who had never used alcohol (36.0%) are more likely to be in complete positive sexual webs, while those who consume alcohol are more likely to be in complete negative sexual webs (40.2%; see Table A6.24, Appendix A6). Furthermore, whereas those who drink Beer (32.9%) are more likely to keep complete positive sexual relationship, those who take assorted drinks (48.3%) are more inclined to keeping complete negative sexual relationships (see Table A6.25, Appendix A6)

Scanning through the distribution of sexual webs status by the number of times individuals drink in a week, reveals that those who have reported that they drink three times a week (32.2%) are more likely to be in complete positive sexual webs, while those who drink twice a week (43.5%) are more likely to keep complete negative sexual webs. Whereas those who have reported that they take Solution (71.4%) are more likely to keep complete positive sexual webs, those who take Cannabis (38.5%) are more likely to be in complete negative sexual webs (see Table A6.26, Appendix A6)

Both the age of sexual relationship, and number of wives kept by the male partner distributions indicate that those who have stayed in their relationship for more than five years (36.9%) are more likely to be complete positive webs, while those have stayed in relationship between one and five years are more likely to be in complete negative sexual webs.

Regarding the number of wives, those who have more than two wives (33.3%) are more likely to be in complete positive sexual webs, while those with one wife (55.6%) are more likely to be in complete negative sexual webs (see Table A6.27, Appendix A6).

6.5 Sexual Webs HIV Status and HIV Variables

In similar way with other variables, both the knowledge of whether many people are infected with HIV and knowledge of source of spread of HIV distributions have shown that those who have disagreed with the view that many people are infected with HIV (43.6%) are more likely to be in negative/don't know sexual webs. Whereas those who have strongly agreed that many people are infected (37.0%), are more likely to be in complete negative sexual relationship (see Table A6.28, Appendix A6); those who said HIV is spread by sharing infected Needles and Syringes (45.0%) are more likely to be in complete positive sexual webs, while those who don't know any source of spread of HIV (50.6%) are more likely to be in complete negative webs (see Table A6.29, Appendix A6)

6.6 Sexual Webs HIV Status and Sexual Webs Variables

The distribution of sexual webs HIV status by variables of sexual satisfaction, and sexual intimacy shows that those who have reported that they are highly satisfied with their primary relationship (40.1%) are more likely to be in complete positive sexual webs, while those who are not satisfied (43.5%) are more likely to be in complete negative sexual webs (see Table A6.30, Appendix A6). Similarly, those who have low sexual intimacy (39.5%) are more likely to be in complete positive sexual intimacy (88.4%) are more likely to be in negative/don't know sexual webs, those with very high sexual intimacy (87.0%) are more likely to be in complete negative sexual webs (see Table A6.31, Appendix A6).

6.7 Summary

The exploration of the association and distribution of sexual webs HIV status by the sexual capacity, sexual motivation, sexual performance, HIV and other sexual webs variables have very useful insight. First, not all variables (for instance, attendance of religious activities, desire for money, respondents' education) have significant correlation with sexual webs HIV status. The strength of the association is not very strong; it ranges from 0.01 to 0.28. Second, that though the bivariate analysis is a preliminary investigation, it can be useful in understanding further analysis. Third, that all the variables irrespective of their correlation

status (significant or not significant) are candidates for multivariate analysis. Fourth, the bivariate analysis further justifies the preference for a generalised linear model for the analysis of data in this study over linear models.

Table 6.1

Correlations and Significant Levels between Sexual Webs HIV Status, Sexual Capacity, and Motivation Variables

Table	Variables	2	X		Y			
	Sexual webs HIV status (X) by y	N of categories	levels of measurement	N of categories	Levels of measurement	Coefficient	Correlation	Significant level
A6.1	Sex of respondents	5	Ordinal	2	Nominal (dichotomous)	Gamma	-0.03	0.44
A6.2	Age	5	Ordinal	10	Ordinal	Gamma	0.23	0.000
A6.3	Relationship status	5	Ordinal	6	Ordinal	Gamma	-0.15	0.000
A6.4	Respondents' education	5	Ordinal	4	Ordinal	Gamma	0.04	0.20
A6.5	Respondents'	5	Ordinal	6	Ordinal	Gamma	-0.07	0.01
A6.6	Leader in religious	5	Ordinal	4	Ordinal	Gamma	0.10	0.001
A6.6	organisation Attendance of religious	5	Ordinal	4	Ordinal	Gamma	-0.01	0.68
A6.7	Respondents'	5	Ordinal	4	Ordinal	Gamma	0.14	0.000
A6.7	Religious	5	Ordinal	4	Ordinal	Gamma	0.01	0.90
A6.8	Religious	5	Ordinal	6	Ordinal	Gamma	0.14	0.000
A6.9	Types of family	5	Ordinal	4	Ordinal	Gamma	0.001	0.98
A6.9	Types of family	5	Ordinal	4	Ordinal	Gamma	0.14	0.000
A6.10	Nollywood influence	5	Ordinal	4	Ordinal	Gamma	0.11	0.000
A6.10	Drinking places	5	Ordinal	4	Ordinal	Gamma	0.002	0.94
A6.11	Hotel	5	Ordinal	4	Ordinal	Gamma	0.03	0.33
A6.11	Laws guiding relationship	5	Ordinal	4	Ordinal	Gamma	0.05	0.07
A6.12	Love	5	Ordinal	4	Ordinal	Gamma	-0.10	0.004
A6.12	Need money	5	Ordinal	4	Ordinal	Gamma	-0.02	0.43
A6.12	Desire children	5	Ordinal	4	Ordinal	Gamma	-0.08	0.01
A6.12	Desire pleasure	5	Ordinal	4	Ordinal	Gamma	-0.17	0.00

Note. Source of data is from field survey, 2014

Table 6.2

Correlation and Significant Levels between Sexual Webs HIV Status, and Sexual Motivation,

Table	Variables		X	Y				
	Sexual webs HIV status (X) by y	N of categories	levels of measurement	N of categories	Levels of measurement	Coefficient	Correlation	Significant level
A6.13	Place to live	5	Ordinal	4	Ordinal	Gamma	0.12	0.000
A6.13	Desire favours	5	Ordinal	4	Ordinal	Gamma	-0.08	0.01
A6.14	Combined love, money & children	5	Ordinal	5	Ordinal	Gamma	0.10	0.001
A6.15	Combined pleasure, place & favours	5	Ordinal	5	Ordinal	Gamma	0.07	0.02
A6.16	Number of children with other partners	5	Ordinal	4	Ordinal	Gamma	0.11	0.01
A6.17	Types of relationship	5	Ordinal	4	Ordinal	Gamma	-0.02	0.87
A6.18	Number of sexual partners	5	Ordinal	3	Ordinal	Gamma	0.08	0.02
A6.19	Brand of condoms	5	Ordinal	5	Ordinal	Gamma	-0.03	0.01
A6.20	Reasons for brand	5	Ordinal	5	Ordinal	Gamma	0.07	0.09
A6.21	Condoms breakage	5	Ordinal	3	Ordinal	Gamma	-0.18	0.000
A6.21	Condoms slip off	5	Ordinal	3	Ordinal	Gamma	-0.28	0.000
A6.22	Reasons for not using condoms	5	Ordinal	7	Ordinal	Gamma	0.11	0.000
A6.23	Condoms usage last six months	5	Ordinal	4	Ordinal	Gamma	-0.10	0.002
A6.24	Sex while drunk	5	Ordinal	3	Ordinal	Gamma	0.13	0.000

and Performance Variables

Note. Source of data is from field survey, 2014.

Table 6.3

Correlation and Significant Levels between Sexual Webs HIV Status, and Sexual

Performance	and HIV	Variables
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	Table	Variables	Х		Y				
-		Sexual webs HIV status (X) by y	N of categories	levels of measurement	N of categories	Levels of measurement	Coefficient	Correlation	Significant level
-	A6.25	Types of alcohol	5	Ordinal	6	Ordinal	Gamma	0.10	0.002
	A6.26	Number of times drink in a week	5	Ordinal	4	Ordinal	Gamma	-0.05	0.27
	A6.26	Types of drugs	5	Ordinal	4	Ordinal	Gamma	-0.13	0.27
	A6.27	Age of relationship	5	Ordinal	3	Ordinal	Gamma	0.11	0.000
	A6.27	Number of wives	5	Ordinal	3	Ordinal	Gamma	0.23	0.000
	A6.28	Many are infected	5	Ordinal	4	Ordinal	Gamma	0.12	0.000
	A6.29	Source of spread of HIV	5	Ordinal	5	Ordinal	Gamma	-0.28	0.000
	A6.30	Satisfaction with primary relationship	5	Ordinal	4	Ordinal	Gamma	0.26	0.000
	A6.31	Levels of sexual intimacy	5	Ordinal	6	Ordinal	Gamma	0.02	0.62

Note: Source of data is from field survey, 2014

CHAPTER SEVEN

BIVARIATE ANALYSIS OF SEXUAL INTIMACY AND SEXUAL CAPACITY, SEXUAL MOTIVATION, SEXUAL PERFORMANCE AND HIV VARIABLES

7.1 Introduction

This chapter will focus on the bivariate analysis of sexual intimacy (variable at relationship level) by the sexual capacity, sexual motivation, sexual performance and HIV variable. Whereas the sexual webs HIV status variable is obtained by combining the HIV statuses of the sexual partners, the sexual intimacy variable is derived from the combination of respondent's knowledge of his or her partner(s) HIV status; number of sexual partners kept by either the respondent or partner(s); and knowledge of whether the partner(s) is having a secret sexual relationship(s) within the five years preceding the study. The variants of these empirical indicators have given rise to six categories of sexual intimacy: no intimacy, very low intimacy, low intimacy, moderate intimacy, high intimacy, and very high intimacy.

All the hypotheses stated in this study would be tested using multivariate analysis in chapter eight. However, preliminary analysis of bivariate relationship between the variable of sexual intimacy and other variables will be carried out in this chapter, to ascertain whether the correlations and significance levels between sexual intimacy and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables really exist or are as a result of sampling error. The direction of association will not be of much interest here since that will be done in chapter eight under multivariate analysis and test of hypotheses. This chapter will help with information for the control of variables during test of hypotheses.

As usual (following the procedure in sections 5.1 and 6.1), the null hypothesis assumes that there is no correlation between two variables (for instance X and Y). In other words, the correlation between the two variables X and Y is zero (0). But correlation is hardly exactly zero. Some correlation values that deviate from zero may be due to sampling error, while some may be due to the existence of association between the two variables in the sample, and by extension to the population; a position assumed by the alternative hypothesis.

At 0.05 level of significance, the variables of age (0.03), respondents' educational attainment (0.01), relationship status (0.000), types of family (0.000), types of law guiding relationship (0.003), respondents' occupation (0.001), love (0.000), types of family support (0.02), the desire for money (0.000), the desire for children (0.02), the need for place to live (0.000), the desire for favours (0.000), condoms usage in the last six months (0.000), types of

alcohol (0.000), and age of relationship (0.000) have a significant correlation (not equal to zero) with sexual intimacy which concords with the position assumed by the alternative hypothesis, which states that there is an association between sex and the independent variables. However, the variables of location of residence (0.75), leadership in religious organisation (0.73), primary partners' occupation (0.34), respondents' occupation (0.35); types of sexual relationship (0.98) and number of times respondents' drink in a week (0.13) have a correlation with sexual intimacy that deviates from zero, but it is not significant, which could be attributed to sampling error. The strength of the association between sexual intimacy and the independent variables varies from 0.01 to 0.38; Tables 7.1 and 7.2 show the correlations and significant levels between sexual intimacy and sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables. The distribution of Sexual intimacy by these independent variables has been discussed in the following sections.

7.2 Sexual Intimacy and Sexual Capacity Variables

This section will focus on exploring the distribution of sexual intimacy by individual (demographics, and socio-economic), family, and structural variables.

7.2.1 Demographic and Socio-economic Variables

Scanning down the columns and rows of the distributions in Tables A7.1 and A7.2, there exists remarkable differences in the percentages between location of residence and sexual intimacy on the one hand and age and sexual intimacy on the other hand. With regard to age, those aged 60 years and above (18.2%) are more likely to keep very high intimacy relationship, while those aged 20-24 years (20.5%) are more likely to be in no intimacy relationship. By location, those living in rural-Ipusu are more likely to be in very high intimacy relationship (17.6%), while those in rural-Ichongu (24.0%) are more likely to be in no intimacy to be in no intimacy relationship (see Tables A7.1 and A7.2, Appendix A7).

Furthermore, those with no formal schooling (18.0%) are more likely to be in no intimacy relationship, while those with tertiary education (7.7%) are more likely to keep very high intimacy relationship. By primary partner educational attainment, those with tertiary education (19.2%) are more likely to engage in no intimacy relationship. With regard to relationship status, those cohabiting (71.4%) are more likely to be in no intimacy relationship, while those who are married (10.5%) are more likely to keep very high intimacy relationship (see Tables A7.3 and A7.4, Appendix A7).

The distribution of sexual intimacy by respondents' occupation and primary partners' main occupation indicates that respondents who are farmers (9.3%) are more likely to be in very high intimacy relationship, while students (20.5%) are more likely to engage in no intimacy relationship. By primary partners' occupation, the artisans (13.8%) are more likely to be in very high intimacy relationship, while the students (22.4%) are more to be in no intimacy sexual relationship (see Tables A7.5 and A7.6, Appendix A7)

Similarly, the distribution of sexual intimacy by income of the respondents depicts that those earning between N25, 000 - N49, 000 (AUD 167-327; 18.8%) are more likely to be in no intimacy relationship while those earning between N50, 000 – N99, 000 (AUD 333-660; 8.2%) are likely to keep very high intimacy relationship (see Table A7.7, Appendix A7). Belonging to religious organisation, being a leader in the organisation, and regular attendance of religious organisation activities indicate the Muslims (29.2%) are more likely to be in no intimacy relationship, while the protestant (8.3%) are more likely to be in very high intimacy relationship (see Table A7. 8, appendix A7). With regard to leadership, those who have agreed to be leaders (18.5%) in their various organisations are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in no intimacy relationship, while those who have strongly affirmed to be leaders (8.3%) are more likely to be in very high intimacy relationship (see Table A7. 9, Appendix A7).

By attendance of activities, those who have strongly disagreed (21.0%) that, they attend religious organisation's activities regularly (16.4%), are more likely to be in no intimacy relationship while those who have agreed that they attend activities regularly are more likely to be in very low intimacy relationship (see Table A7.9, Appendix A7)

7.2.2 Sexual Intimacy and Family Variables

In similar vein, the distribution of sexual intimacy by types of family the respondents have come from, and the type of support they receive from family members indicates that those who have come from a single family (22.4%) are more likely to be in no intimacy relationship while those from a monogamous family (8.9%) are more likely to be in very high intimacy relationship. Furthermore, those who have reported that they receive support both in cash and material from family members (31.2%) are more likely to be in no intimacy relationship; while those do not receive support (7.6%) are more likely to keep very high intimacy relationship (see Tables A7.10, Appendix A7)

7.2.3 Sexual Intimacy and Structural Variables

Relationships are guided by certain laws. The relationships guided by religious laws (7.4%) are more likely to be in very high intimacy, while the relationships guided by court laws (25.9%) are more likely to belong to no intimacy category (see Table A7.11, Appendix A7)

7.3 Sexual Intimacy and Motivation Variables

The examination of the distribution of sexual intimacy by the motivation variables love, need money, would like to have children, pleasure, place to live, and favours depicts that those who strongly agreed that money (23.8%); pleasure (18.1%); place to live (22.9%); and favours (27.8%) motivated their sexual relationships are more likely to be in no intimacy sexual relationships. While those who have strongly agreed that they were motivated by the desire for children (7.4%) to engage in sexual relationships are more likely to keep very high intimacy relationship. With regard to love, those who have strongly agreed to be motivated by love for relationship are less likely to keep very high intimacy relationship than those who have disagreed (7.4% vs 7.6%; see Tables A7.12 and 7.13a, and b, Appendix A7).

Apart from the individual roles played by the motivation variables to the formation of sexual relationships; the variables can in several ways jointly influence relationships. Those who have been influenced by love and the desire for children (8.7%) are more likely to be in very high intimacy relationship, while those influenced by children and money (26.0%) are more likely to be in no intimacy relationships. Furthermore, those who are in relationship due to pleasure and favours are more likely to be in no intimacy relationships, while those who have been influenced by the need for place to live and favours are more likely to be in very high intimacy relationship (See Tables A7.14 and 7.15, Appendix A7).

In similar way, those who have reported staying away without their primary partner(s) for over one year (34.7%) are more likely to be in no intimacy relationships, while those have stayed away without their partner(s) for a period less than six months (7.9%) are more likely to be in very high intimacy relationship (see Table A7.16, Appendix A7).

The distributions of number of children the respondents have with either the primary or other partners, or both, show that those who have reported that they don't have a child with the primary partner (24.8%) are more likely to be in no intimacy relationships, while those with more than three children (10.5%) are more likely to be in very high intimacy relationship. Respondents having two or more children (27.4%) with other partners are more likely to be in no intimacy relationship (see Table A7.17, Appendix A7). Furthermore, those who have reported that they received support from their partners (14.3%) are more likely to

keep very high intimacy relationship while those who don't receive support are more likely to be in no intimacy relationships (see Table A7.18, Appendix A7).

7.4 Sexual Intimacy and Sexual Performance Variables

Those who have reported that they are lesbians (50.0%), are more likely to be in no sexual intimacy relationships, while bisexual individuals (10.3%) are more likely to be in very high intimacy relationship (see Table A7.19, Appendix A7). Furthermore, those who have been using Lifestyle brand of condoms (22.7%) are more likely to be in no intimacy relationships, while those utilising Fantasy brand (12.5%) are more likely to keep very high intimacy (see Table A7.20, Appendix A7). The respondents who have chosen condoms brand because of its availability (19.8%) are likely to be in no intimacy relationships, while those who have chosen condoms brand due to pleasure (10.0%) are more likely to keep very high intimacy (see Table A7.21, Appendix A7). Similarly, individuals who have reported that they sometimes utilise condoms (17.9% see Table A7.22, Appendix A7) and those who don't use condoms (26.3%) because it reduces sexual pleasure are more likely to be in no intimacy relationships (see Table A7.23, Appendix A7). Furthermore, those who have reported that they take Burukutuu (28.4%) and those who drink more than three times a week (25.4%) are more likely to be in no intimacy relationship (see Tables A7.24 and 25, Appendix A7)

In similar way, those who reported that they take Cannabis (69.2%) and those whose relationship (24.0%) is less than one year are more likely to be in no intimacy relationships, while those who have stayed for over 5 years in their relation (10.4%) are more likely to keep very high intimacy relationship. With regard to number of sexual partners, those who have reported keeping two or more partners are more likely to be in moderate intimacy relationships (64.2%), while those with one partner only are more likely to be in very high intimacy relationship (see Tables A7.26 and 27, Appendix A7)

7.5 Sexual Intimacy and HIV Variables

The distribution of the knowledge of sources of the spread, and the attitude towards HIV infection show that those who reported not being aware of any source of the spread of HIV (21.5%), and those who said they will not feel bad if infected with HIV (24.1%) are more likely to be in no intimacy relationships (see Table A7.28 and A7.29, Appendix A7). Similarly, those who said they are somewhat satisfied (32.7%) with their relationship are more likely to be in no intimacy relationships, while those who said they are highly satisfied

with their relationship are more likely to be in very high intimacy relationship (see Table A7.30, Appendix A7)

7.6 Summary

The exploration of the relationship between sexual intimacy and the sexual capacity, sexual motivation, sexual performance, HIV, and other sexual webs variables has very useful insight. First, all the variables have significant correlation with sexual intimacy. Second, that though the bivariate analysis is a preliminary investigation, it can be useful in understanding further analysis. Third, that all the variables would be further examined using multivariate analysis to ascertain their relative effect on sexual intimacy; the strength of the association between sexual intimacy and the independent variables is not very strong. It ranges from 0.01 to 0.38 justifying the need for multivariate analysis as stated earlier. Four, the bivariate analysis further justify the preference for a robust generalised linear model for the analysis of data in this study over linear models.

Table 7.1

Correlations and Significant Levels between Sexual Intimacy Variables, and Sexual Capacity Variables

Table	Variables	Х		Y				
	Sexual	N of	levels of	N of	Levels of	Coefficient	Correlation	Significant
	intimacy (X)	categories	measurement	categories	measurement			level
	by y		<u> </u>		<u> </u>	9	0.01	0.5.5
A7.1	Location of	6	Ordinal	4	Ordinal	Gamma	0.01	075
Δ7 2	A ge of	6	Ordinal	10	Ordinal	Gamma	0.06	0.03
111.2	respondents	0	Orumar	10	oruna	Gaillina	0.00	0.05
A7.3	Respondents	6	Ordinal	4	Ordinal	Gamma	0.09	0.01
	education							
A7.4	Relationship	6	Ordinal	6	Ordinal	Gamma	-0.42	0.000
175	status Respondents'	6	Ordinal	6	Ordinal	Commo	0.03	0.25
A7.3	occupation	0	Orumai	0	Orumai	Gaillina	-0.03	0.33
A7.6	Partners'	6	Ordinal	6	Ordinal	Gamma	-0.03	0.34
	occupation							
A7.7	Respondents'	6	Ordinal	4	Ordinal	Gamma	0.01	0.78
	income	6		6		C	0.02	0.65
A/.8	Religious	6	Ordinal	6	Ordinal	Gamma	0.02	0.65
A7 9	Leader in	6	Ordinal	4	Ordinal	Gamma	-0.01	0.73
11/19	religious	0	orumu	•	orumui	Guillinu	0.01	0.75
	organisation							
A7.10	Types of	6	Ordinal	4	Ordinal	Gamma	-0.15	0.000
47 10	family	6	Out in al	4	O all'a al	C	0.00	0.02
A/.10	family	0	Ordinal	4	Ordinal	Gamma	0.08	0.02
	support							
A7.11	Types of	6	Ordinal	4	Ordinal	Gamma	-0.10	0.003
	laws guiding							
	relationship					~		
A7.12	Love	6	Ordinal	4	Ordinal	Gamma	0.09	0.02
A7.12	Need money	6	Ordinal	4	Ordinal	Gamma	-0.17	0.000
A7.13	Desire for	6	Ordinal	4	Ordinal	Gamma	0.08	0.02
17 10	children	6		4		C	0.01	0.74
A/.13	Desire	6	Ordinal	4	Ordinal	Gamma	0.01	0.76
A7.13	Place to live	6	Ordinal	4	Ordinal	Gamma	0.18	0.000
A7 13	Desire	6	Ordinal	4	Ordinal	Gamma	-0.25	0.000
117.15	favours	0	Orumar	т	Orumar	Gaillina	0.25	0.000
A7.14	Combined	6	Ordinal	5	Ordinal	Gamma	-0.04	0.17
	love, money							
	& children	<i>.</i>		-		a	0.00	0.000
A7.15	Combined	6	Ordinal	5	Ordinal	Gamma	-0.23	0.000
	place, pleasure &							
	favours							

Note. Source of data is from field survey, 2014

Table 7.2

Correlations and Significant Levels between Sexual Intimacy, and Sexual Motivation and Performance Variables

Table	Variables	Х		Y				
	Sexual	N of	levels of	N of	Levels of	Coefficient	Correlation	Significant
	intimacy	categories	measurement	categories	measurement			level
	(X) by y							
A7.16	Period away	6	Ordinal	5	Ordinal	Gamma	-0.19	0.000
	from							
	primary							
	partner					~		
A7.17	Children	6	Ordinal	4	Ordinal	Gamma	0.20	0.000
	with							
	primary							
47 17	partner	6	Ondinal	4	Ondinal	Commo	0.16	0.001
A/.1/	United with other	0	Ordinal	4	Ordinal	Gamma	-0.16	0.001
	with other							
Δ7 18	Partners'	6	Ordinal	2	Nominal	Gamma	0.13	0.004
11/.10	assistance	0	orumar	2	(dichotomous)	Gamma	0.15	0.004
A7.19	Types of	6	Ordinal	4	Ordinal	Gamma	0.003	0.98
	sexual	-		-				
	relationships							
A7.20	Condoms	6	Ordinal	5	Ordinal	Gamma	-0.10	0.05
	brand							
A7.21	Reasons for	6	Ordinal	5	Ordinal	Gamma	0.04	0.27
	condoms							
	brand							
A7.22	Condoms	6	Ordinal	3	Ordinal	Gamma	0.14	0.000
	usage last							
. =	six months	-	0 11 1	_		a	0.01	0.001
A7.23	Reasons for	6	Ordinal	7	Ordinal	Gamma	0.01	0.001
	not using							
17.24	condoms Types of	6	Ondinal	6	Ondinal	Commo	0.21	0.000
A7.24	lypes of	0	Ordinal	0	Ordinal	Gamma	0.21	0.000
A7 25	Number of	6	Ordinal	4	Ordinal	Gamma	0.07	0.13
A1.23	times drink	0	Orumar	4	Orumai	Gamma	-0.07	0.15
	in a week							
A7.26	Types of	6	Ordinal	4	Ordinal	Gamma	0.38	0.04
	drugs							
	consumed							
A7.27	Age of	6	Ordinal	3	Ordinal	Gamma	0.23	0.000
	relationship							
A7.28	Knowledge	6	Ordinal	5	Ordinal	Gamma	-0.14	0.001
	of source of							
	spread of							
	HIV		~			~		
A7.29	Will teel bad	6	Ordinal	4	Ordinal	Gamma	0.09	0.07
A7 30	II Intected Satisfaction	6	Ordinal	4	Ordinal	Gamma	0.33	0.000
111.30	with primary	5	Juniur	r	Juniur	Juinna	0.00	0.000
	relationship							

Note. Source of data is from field survey, 2011

CHAPTER EIGHT

MULTIVARIATE ANALYSIS AND TEST OF HYPOTHESES

8.1 Introduction

In this chapter, the research questions and hypotheses stated in Chapter One will be addressed using multivariate analysis. The questions are: (1) what are the forms or types of sexual relationships among partners within the sexual web (sexual relationships) in the study area? (2) What are the levels of sexual intimacy among sexual partners in the sexual webs? (3) What is the relationship between levels of intimacy and unsafe sexual behaviours in the sexual webs? (4) What is the relationship between unsafe sexual behaviours and the spread of HIV/AIDS in the study area?

Further, the hypotheses that will be tested are: (1) the levels of intimacy among sexual partners in the sexual webs would depend on their sexual capacity, sexual motivation; sexual performance and HIV variables; (2) the lesser the intimacy among sexual partners the more likely the unsafe sexual behaviour; (3) the extent of positive sexual webs will depend on the extent of the unsafe sexual behaviours; (4) the extent of the spread of HIV/AIDS in an area will depend on the extent of the positive sexual webs in the areas.

The bivariate correlations between the independent variables (sexual capacity, sexual motivation, sexual performance, HIV variables) and sex, sexual webs HIV status (partners' HIV status), and levels sexual intimacy have been examined in chapters 5, 6, and 7 respectively, it was observed that not all the independent variables have significant association with the dependent variables of sexual webs HIV status (partners' HIV status), and levels of sexual intimacy. The information in these chapters (5, 6 and 7) will help with the control of variables during the test of hypotheses.

Both sexual webs HIV status (partners HIV status) and levels of sexual intimacy (dependent variables) are ordinal variables with 5 and 6 categories respectively. The probability of obtaining subcategory c_i across C categories of the dependent variable in N trials is not evenly distributed. In other words, the probability is not normally distributed. In this case, the sum of the probabilities across the 6 categories of sexual intimacy will add to 1. The random value such as the mean obtained from this kind of distribution is not assumed to have come from normal distribution, because categorical variables assume finite or countable infinite number of values (Heck, Thomas, &Tabata, 2012). Categorical variables are better

described by binomial or multinomial probability distributions rather than normal distribution.

As stated above, sexual intimacy is an ordinal variable; however, there are no studies of this nature to provide empirical evidence from existing literature to suppose that the influence of the independent variables on the categorical membership of this variable follows that pattern. Thus, to accommodate the existence of a parallel structure where the independent variables have same effect on the odds of being in each successive category, a multinomial logistic regression is preferred over ordinal logistic regression (see Hox, 2010).

The multinomial distribution is an extension of the Bernoulli probability distribution where the categorical variable has more than two categories. The other categories are separately compared to the selected reference group. Hence the choice of Generalised Linear Model with cumulative logit link for multivariate analysis. The data is replete with categorical variables with more than two categories including the dependent variables. This chapter will focus on multivariate analysis and test of hypotheses.

The Generalised Linear Models (Multinomial) with cumulative logit link has been used for multivariate analysis and test of hypotheses. The model has both fixed and interactive parameters effects (individual level residuals) and nesting at the location level. The samples of study are from small number of locations which are unique entities (the locations not representative samples from population in the strict sense of it). However, there exists the interest to examine the sexual intimacy among individuals nested within the locations.

Several models have been tried and examined by reading the results from model effect test, iteration history, Bayesian criterion information (BIC), Likelihood Ratio and the estimated parameters. The trials began with an intercept only model, and proceeded to models with factors and covariates. The intercept only model examines the dependent variable while the subsequent models relate the dependent and independent variables. The variables have been examined under sub-themes and as a whole by bringing the significant variables under one model to examine their effect on the dependent variable amidst test of hypotheses.

8.2 Levels of Sexual Intimacy and Sexual Capacity Variables

The relationship between levels of sexual intimacy (dependent) and sexual capacity (independent) variables will be examined under this section.

8.2.1 Intercept only Model (Levels of Sexual Intimacy)

An intercept only model has been used to examine the dependent variable holding all the other variables constant at zero. The reference group is very high sexual intimacy (the highest group). The no intimacy, very low intimacy, and low intimacy categories are negatively (-1.609; -0.758 and -0.446) related to very high intimacy; while moderate intimacy and high intimacy are positively related to very high intimacy (2.277 and 2.646 respectively). The odds for an individual at the no intimacy level to be in very high intimacy relationship relative to very low intimacy, low intimacy, moderate intimacy and high intimacy are reduced by 80% (1-20.0%); while the odds for an individual at very low intimacy to be in very high intimacy relative to no intimacy, low intimacy, moderate intimacy and high intimacy are reduced by 53.1%. Whereas the odds are reduced by 36% for the individual at the low intimacy level to be in very high intimacy relative to no intimacy, very low intimacy, moderate intimacy, and high intimacy, the odds are 9.7 times high for the individual at the level of moderate intimacy to be in very high intimacy relative to no intimacy, very low intimacy, low intimacy and high intimacy. Finally, the odds are 14.1 times high for the individual in high intimacy to be in in very high intimacy relative to no intimacy, very low intimacy, low intimacy, and moderate intimacy The model is significant at 5% (P = 0.000) level of significance, and it satisfies all convergence criteria. It will be used to assess the significance of other models tested to examine the relationship between sexual intimacy and independents variables (see Table 8.1)

Table 8.1

			Test of	of	95% Confidence		
		Std.	Signi	Significance		Interva	1
Variable	В	Error	Df	Sig.	Odds	Lower	Upper
No intimacy	-1.609	.0670	1	0.000	.200	.176	.228
Very low intimacy	758	.0536	1	0.000	.469	.422	.521
Low intimacy	446	.0512	1	0.000	.640	.579	.708
Moderate intimacy	2.277	.0860	1	0.000	9.745	8.233	11.535
High intimacy	2.646	.1005	1	0.000	14.104	11.582	17.175

Intercept only Model (Sexual intimacy)
Note. The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. Reference group = Very high sexual intimacy; Std. Error = standard error; Df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values= less or equal to 0.05 are in bold print

8.2.2 Levels of Sexual Intimacy and Sexual Capacity Variables Model

The relationship between levels of sexual intimacy and individual (demographics, socioeconomic), family, and structural variables will be examined by testing sequence of models. The process is to identity fixed effects as well as the interactive effects of the independent variables on the dependent variable. All the sexual capacity variables (age, sex, education, relationship status, income, residence, religion, occupation, family and structural variables) have been examined (Table A8.1, Appendix A8) and, consistently sexual relationship status, education, family type and support from family members have remained significant predictors of sexual intimacy.

The model presented in Table A8.2 (see Appendix A8) is significant at 5% level of significance (P = .000) and explains changes in levels of sexual intimacy better than the intercept only model (no intimacy -1.609 vs -3.471; very low intimacy -0.758 vs -2.537; low intimacy -0.446 vs -2.209; moderate intimacy 2.277 vs 0.707; high intimacy 2.646 vs 1.090). The variables, sexual relationship status (P = 0.000), respondents education (P = 0.007), family types (P = 0.001), and support from families (P = 0.000) are significantly related to sexual intimacy. However, these variables were examined again, along with other variables in subsequent models.

8.3 Sexual Intimacy and Sexual Motivation Variables Model

As earlier indicated in the case of sexual capacity variables, sequence of models were tested to examine the relationship between sexual intimacy and sexual motivation (love, need money, pleasure; place to live; favours; partner assistance; partner stay away; children with primary or other partners) variables. The model presented in Table A8.2 (see Appendix A8) is significant at 5% level of significance (P = .000) and there are changes in the levels of the dependent variable which are significantly related to the impact of motivation variables (no intimacy -1.609 vs 0.439; very low intimacy -0.758 vs 1.352; low intimacy -0.446 vs 1.686; moderate intimacy 2.277 vs 4.579; high intimacy 2.646 vs 4.958). The variables, desire for

favours (P = 0.000), pleasure, place to live and favours (P = 0.03), place to live (P = 0.004), children with primary partner (P = 0.000), and period stayed away primary partner (P = 0.000) are significantly related to sexual intimacy. However, these variables were examined again, along with other variables in subsequent models.

8.4 Levels of Sexual Intimacy and Sexual Performance Model

The model examines the relationship between sexual intimacy and sexual performance (number of sexual partners, usage of condoms, alcohol consumption, drug usage, age of relationship, secret partners) variables. This model is significant at 5% level of significance (P = .000) and explains sexual intimacy better than the intercept only model (no intimacy - 1.609 vs -7.283; very low intimacy -0.758 vs -6.151; low intimacy -0.446 vs -5.790; moderate intimacy 2.277 vs -2.650; high intimacy 2.646 vs -2.197). All the variables in the model are persistently significant over sequence of models trials and controls. In examining the relationship between the dependent and independent variables, the assumption still remains that the other variable are held constant at zero except the variable of interest in relation to the dependent variable. The variables, had sex while drunk (P = .000), types of alcohol consumed (P = .000), reasons for not using condoms (P = .013), partner's number of wives (P = .000), number of sexual partners (P = .000), and the age of the relationship (P = .005) are significantly related to sexual intimacy. However, these variables would be examined again, along with other variables in subsequent models (see Table A8.3, Appendix A8).

8.5 Levels of Sexual Intimacy and HIV Variables Model

This model examines the relationship between levels sexual intimacy and HIV (tested for HIV, HIV status, partners HIV status, knowledge of main source of spread, knowledge of people who have die of HIV, whether several people are infected, feel bad if infected) variables. The model is significant at 5% level of significance (P = .000) and explains changes in the level of sexual intimacy better than the intercept only model (no intimacy - 1.609 vs -1.810; very low intimacy -0.758 vs -1.068; low intimacy -0.446 vs -0.789; moderate intimacy 2.277 vs 1.514; high intimacy 2.646 vs 1.921). Amongst the independents variables in the model, only partner's HIV status (P = .000), and knowledge of several people infected with HIV (P = .000) variables remained consistently significant over sequence of

analysis However, these variable were examined again, along with other variables in subsequent models (see Table A8.4, Appendix A8).

8.6 Levels of Sexual Intimacy and all the Independent Variables Model

The model explains the relationship between levels of sexual intimacy and all the independent variables that have remained consistently significant over sequence of models. The model is significant at 5% level of significance (P = 0.000) and explains sexual intimacy better than the intercept only model (no intimacy -1.609 vs -4.834; very low intimacy -0.758 vs -3.631; low intimacy -0.446 vs -3.240; moderate intimacy 2.277 vs 0.054; high intimacy 2.646 vs 0.564; see Table A8.5, Appendix A8).

All the variables have retained their slope (positive or negative slope) as in the other models. These variables are significantly related to the dependent variable at 5% level of significance (see Table 8.2 and Table A8.5 in Appendix A8): sex while drunk (P = .000; Odd Ratio (OR) = 0.024; Confidence Interval (CI) = 0.011-0.055); types of alcohol (P = 0 .000; OR = 23.168; CI = 7.541-71.199), partner stay away (P = .000; OR = 3.449; CI = 1.882-6.320); number of sexual partners (P = .000; OR = 0.254; CI = 0.194-0.334); partner's wives (P = .000; OR = 0.380; CI = 0.272-0.532); partner's HIV status (P = .000; 2.505; CI = 1.770-3.547); favours (P = .000; OR = 3.018; CI = 1.664-5.485); relationship satisfaction (P = 0.025; OR = 0.489; CI = 0.261-0.915); types of family support (P = .038; OR = 0.525; CI = 0.285-0.964); and family type (P = .062).

The variable 'had sex while drunk' significantly interacts with types of alcohol (P = .000), and significantly nested in the types of family (P = .000) to influence membership in all the categories of sexual intimacy (see Table A8. 7 in Appendix A8). Similarly, satisfaction with primary relationship is significantly (P = .000) nested in the types of family to influence categorical membership in sexual intimacy (see Table A8.8, Appendix A8). Furthermore, types of alcohol significantly interacts with partner's HIV status (P = .000), satisfaction with primary relationship significantly interacts with partner's HIV status (P = .000), partner's HIV status is significantly nested in the types of family (P = .000) to influence categorical membership in sexual intimacy (see Table A8.9, Appendix A8). In addition, the period of stay away without primary partner significantly interacts with number of sexual partners (P = .000), and had sex while drunk is significantly nested in the locations (P = .000) to influence categorical membership in sexual intimacy (see Table A8.9, Appendix A8). In addition, the period of stay away without primary partner significantly nested in the locations (P = .000) to influence categorical membership in sexual intimacy (see Table A8.10, Appendix A8).

8.7 Sexual Webs HIV Status (Partners' HIV Status) and Levels of Sexual Intimacy Model

This model explains the relationship between sexual webs HIV status and sexual intimacy variable. Sexual webs HIV status is the dependent variable while sexual intimacy variable is the independent variable. The model indicates that the relationship between the variables is significant at 5% (P = .000). Sexual intimacy significantly influences categorical membership in sexual webs HIV status (see Table A8.6, Appendix A8).

8.8 Test of Hypotheses

Table 8.2

Variables and Significant Values at 5% Level of significance

Source	P value	Odd Ratio	Confidence Limits		
			lower	upper	
Types of family support	0.038	0.525	0.285	0.964	
Favours	0.000	3.018	1.664	5.485	
Partners HIV status	0.000	2.505	1.170	3.547	
Sex while drunk	0.000	0.024	0.011	0.055	
Types of alcohol	0.000	23.168	7.541	71.99	
Satisfaction with relationship	0.025	0.489	0.261	0.915	
Partner stay away	0.000	3.449	1.882	6.320	
Number of sexual partners	0.000	0.254	0.194	0.334	
Partners' wives	0.000	0.380	0.272	0.532	

Note. The source of the data is from field survey, 2014. P value = probability (significant values). The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis; see also Table A5, Appendix A) was used for analysis.

8.8.1 Test of Hypothesis 1

The null hypothesis states that there is no relationship between levels of sexual intimacy and sexual capacity, sexual performance, sexual motivation, and HIV variables; while the alternative hypothesis states that there is a relationship between levels of sexual intimacy and sexual capacity, sexual motivation, sexual performance, and HIV variables.

The test will be carried out at 5% level of significance; the null hypothesis will be accepted for probability higher than 0.05, but rejected for probability values below or equal to 0.05. From Table 8.2 the probability values of the variables are: relationship status (P = .000); sex while drunk (P = .000); types of alcohol (P = .000) partner stay away (P = .000); number of sexual partners (P = .000); partner's wives (P = .000); partner's HIV status (p = .000); favours (P = .001); relationship satisfaction (P = .025); and types of family support (P = .000);

.038). All the probability values are less than .05; the null hypothesis is rejected for the alternative hypothesis. The variables have significant relationship with sexual intimacy.

Sexual capacity variable are: relationship status (P = .000) and types of family support (P = .038); Sexual motivation variables: favours (P = .000) and partner stay away (P = .000); Sexual performance variables: number of sexual partners (P = .000), partners wives (P = .000), sex while drunk (P = .000), types of alcohol (P = .000); HIV variable: partner's HIV status (P = .000); and sexual webs variable: relationship satisfaction (P = .025). Therefore sexual intimacy depends on sexual capacity, sexual motivation, sexual performance, HIV and sexual webs variables.

8.8.2 Test of Hypothesis 2

It has been verified that sex while drunk, type of alcohol, number of sexual partners and partner's wives variables (types of unsafe sexual practices) are significantly related to levels of sexual intimacy. In Table A8.5, Appendix A8, the B values of sex while drunk (-3.725; - 3.553), number of sexual partners (-1.369) and partner's wives (-0.967) are negative. These indicate that, as the number of sexual partners or wives increases, or if there is increase in sex while drunk, the probabilities for individuals to be in higher levels of sexual intimacy will decrease, thus more partners will be found at lower levels of sexual intimacy (no intimacy, very low intimacy, and low intimacy). Therefore, it has been verified that the more the unsafe sexual behaviours, lesser the levels of sexual intimacy, and verse versa.

8.8.3 Test of Hypothesis 3

There is significant relationship between sexual webs HIV status and sexual intimacy (P = .000). The B values of sexual intimacy (-2.445, -2.889, -2.928, -2.835 and -2.303) are negative indicating that as low levels of sexual intimacy increase, the probabilities to be in both negative/ negative don't know partners HIV status will decrease. Hence more partners will be at both positive versus positive/ don't know partners status of sexual webs HIV status. Therefore, the extent of sexual webs HIV status will depend on the extent of the levels of sexual intimacy.

Thus, the following hypotheses have been verified:

(i) The extent of sexual intimacy depends on the extent of unsafe sexual behaviours; and

(ii) The extent of sexual webs HIV status depends on the extent of sexual intimacy.

Therefore, the extent of sexual webs HIV status (both positive webs) depends on unsafe sexual behaviours (B then A, A then C, B then C; B = A = C; as illustration from (i) and (ii) above: A = the levels of sexual intimacy; B = the extent of unsafe sexual behaviour; C = the extent of sexual HIV status). The extent of unsafe sexual behaviours influences categorical membership of sexual intimacy, while levels of sexual intimacy influences categorical membership of sexual webs HIV status (partners' HIV status).

8.8.4 Test of Hypothesis 4

Hypothesis 4 states that the extent of the spread of HIV/AIDS in an area will depend on the extent of the positive sexual webs in the areas. Table 8.3 shows that 69.9% of the positive webs in Urban-Ichongu are both positive, and given the conditions that: (1) there are more individuals who keep more than one sexual partner in urban-Ichongu and urban-Ipusu than in the other locations; (2) there are more individuals who have experienced condoms breakage and slip off in rura-Ichongu and urban-Ichongu than in the other locations; (3) several individuals have indulged in irregular usage of condoms in urban-Ichongu and rural-Ichongu than in the other locations; and (4) there are more individuals who have had sex while drunk or had taken drugs in urban-Ichongu and rural-Ichongu than in the other locations (see Tables B10, B12, and B14, Appendix B; see also Table A8.10, significant interaction between number of sexual partners and partner stay away (P =.000); sex while drunk nested in the locations, P = .000); under these conditions of unsafe sexual behaviours, HIV will spread faster in Urban-Ichongu than the other areas with less percentage of both positive sexual webs.

Table 8.3

Location of Respondents Residence									
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%			
	Ichongu		Ichongu						
Sexual Webs HIV Status									
Negative/Don't know	35.3%	31.6%	0.0%	0.0%	266	16.6			
Both Negative	64.3%	67.7%	0.0%	0.0%	525	32.8			
Positive/Don't know	0.0%	0.0%	15.5%	16.3%	128	8.0			
Positive/Negative	0.5%	0.8%	14.7%	25.1%	166	10.4			
Both positive	0.0%	0.0%	69.8%	58.6%	516	32.2			
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Sexual Webs HIV Status and Location of Respondents Residences

Note. The source of data is from field survey, 2014

8.9 Interaction between Variables, Nesting in Types of Family and Location

As indicated under section 8.6, apart from fixed effects, the interactions between variables, nesting in types of family and locations have significantly influenced categorical membership in the dependent variable- sexual intimacy. Extended family relations are rife with exogamous marital arrangement in all the locations. Whereas some interactions influence categorical membership in all the categories of sexual, some have dominant impact on no sexual intimacy, very low intimacy, and low intimacy. The variable 'had sex while drunk' significantly interacts with types of alcohol (P = .000), and significantly nested in the types of family (P = .000) to influence membership in all the categories of sexual intimacy (see Table A8. 7 in Appendix A8). Similarly, satisfaction with primary relationship is significantly (P= .000) nested in the types of family to influence categorical membership in all the categories of sexual intimacy (see Table A8.8, Appendix A8). Furthermore, types of alcohol significantly interacts with partner's HIV status (P = .000); satisfaction with primary relationship significantly interacts with partner's HIV status (P = .000), partner's HIV status is significantly nested in the types of family to influence categorical membership in sexual intimacy, but more dominant on no sexual intimacy, very low intimacy, and low intimacy (see Table A8.9, Appendix A8). In addition, the period of stay away without primary partner significantly interacts with number of sexual partners (P = .000), and had sex while drunk is significantly nested in the locations (P = .000) to influence categorical membership in sexual intimacy, but also more dominant on no sexual intimacy, very low intimacy and low intimacy (see Table A8.10, Appendix A8).

8.10 Summary

The research hypotheses have been logically deduced from the research questions and objectives, hence the verification of the hypotheses means the objectives have been achieved and all the research questions answered. The research has been able to identify types of sexual relationships (heterosexuality, homosexuality, lesbian and bisexual) and sexual webs HIV status (positive/negative, positive/don't know, positive/positive, negative/negative, and negative/don't) in the areas; thus providing answer to Question One (1) - what are the forms or types of sexual relationships among partners within the sexual web (sexual relationships) in the study area?

The levels of sexual intimacy in the study areas are: no intimacy, very low intimacy, low intimacy, moderate intimacy, high intimacy and very high intimacy. This answers the

second research question which states that "what are the levels of sexual intimacy among sexual partners in the sexual webs"? The third research question (what is the relationship between levels of intimacy and unsafe sexual behaviours in the sexual webs?) and the fourth (what is the relationship between unsafe sexual behaviours and the spread of HIV/AIDS in the study area?) have been answered by the verification that sexual intimacy depends on sexual capacity, sexual performance, sexual motivation, and HIV variables. The extent of sexual webs HIV status depends on levels of sexual intimacy, and the spread of HIV in the area depends on the extent of positive sexual webs and unsafe sexual behaviours. Thus, there are more both positive sexual webs in urban-Ichongu than the other locations, hence HIV will spread in urban-Ichongu faster than the other locations given that (1) there are more individuals who keep more than one sexual partner in urban-Ichongu and urban-Ipusu than in the other locations; (2) there are more individuals who have experienced condoms breakage and slip off in rura-Ichongu and urban-Ichongu than in the other locations (3) several individuals have indulged in irregular usage of condoms in urban-Ichongu and rural-Ichongu than in the other locations; and (4) there are more individuals who have had sex while drunk or had taken drugs in urban-Ichongu and rural-Ichongu than in the other locations (see Tables B10, B12, and B14, Appendix B); under these conditions of unsafe sexual behaviours, HIV will spread faster in Urban-Ichongu than the other areas with less percentage of both positive sexual webs.

Apart from fixed effects, the interactions between variables, nesting in types of family and locations have significantly influenced categorical membership in the dependent variable- sexual intimacy. Extended family relations are rife with exogamous marital arrangement in all the locations. Whereas some interactions influence categorical membership in all the categories of sexual intimacy, some have dominant impact on no sexual intimacy, very low intimacy, and low intimacy. The variable 'had sex while drunk' significantly interacts with types of alcohol, and is significantly nested in the types of family to influence membership in all the categories of sexual intimacy. Similarly, satisfaction with primary relationship is significantly nested in the types of family to influence categorical membership in all the categories of sexual intimacy. Furthermore, types of alcohol significantly interacts with partner's HIV status; satisfaction with primary relationship significantly interacts with partner's HIV status; partner's HIV status is significantly nested in the types of family to influence categorical membership in sexual intimacy, but is more dominant at the level no sexual intimacy, very low intimacy, and low intimacy. In addition, the period of stay away without primary partner significantly interacts with number of sexual partners, and had sex while drunk is significantly nested in the locations to influence categorical membership in sexual intimacy, but also more dominant at level no sexual intimacy, very low intimacy and low intimacy.

CHAPTER NINE

QUALITATIVE FINDINGS ON SEXUAL CAPACITY, SEXUAL MOTIVATION, SEXUAL PERFORMANCE AND HIV VARIABLES

9.1 Introduction

The multivariate analysis in Chapter 8 was conducted at the partners' level. It has provided information on the correlates of sexual intimacy and sexual webs HIV status (partners HIV status). The categories of sexual webs HIV status: Positive/don't know, Positive/Negative; Positive/Positive (Both positive); Negative/don't know; and Negative/Negative (Both negative) negatively correlate with unsafe sexual practices such as high numbers of sexual partner, having sexual intercourse while drunk, condoms usage and levels of sexual intimacy. This implies that partners' HIV seropositive status is associated with lower levels of sexual intimacy and unsafe sexual practices while HIV seronegative status is associated with high levels of sexual intimacy and safer sexual practices. Thus the differences in the sexual practices amongst sexual partners of the various HIV statuses have been observed in the quantitative data.

This chapter will focus on qualitative findings on the influence of structural factors on sexual practices and HIV risks amongst partners. In-depth interviews were conducted with 20 respondents, who were selected during the quantitative data collection for the purpose of nesting the quantitative and qualitative findings. The strategy is to gain further insight into the quantitative from the qualitative findings. Ten out of the 20 respondents are HIV positive individuals. Pseudo names have been used to segregate the responses obtained from the respondents.

9.2 Qualitative Findings on Sexual Capacity Variables

This sub-theme will focus on the influence of social events and engagements, drinking places, hotels, pornographic firms, norms, and poverty on sexual behaviours.

9.2.1 Social Events and Engagements

9.2.1.1 The Markets

There are open markets that are held on a weekly or every fifth day basis, in both urban and rural areas. On the day of the market, both the young adults and older people will go there to either buy or sell something. These markets are arena for interaction of lovers who are

meeting for the first time or who have been meeting regularly. One of the respondents aptly describes the action as:

The youths are sexually active; some ladies will take something to the market to sell; so on getting to the market, they will keep the thing with a friend and go to meet a boyfriend. The boys also do the same. Some of them are infected with diseases. They do these things without the knowledge of the parents. Some girls have become pregnant and dropped out of school or have committed abortion (Mhoonum, Female; 32 years)

The issue of lovers meeting in the market to negotiate sex has created social tension on the part of partners who are curious about what is going on in the market whenever their partner(s) is there; this anxiety has been expressed in the following statement:

My neighbour will drop his wife at the market and come back home; he will wait for some minutes and call her to know whether she is still at the market place. If there no noise at the background, the wife must explain where she went to, because the market place is always noisy, it cannot be quiet (Nomdoo; Male; 35 years).

9.2.1.2 Funerals

The death of relations, friends, or other individuals is a universal phenomenon. When someone dies, a funeral is organised. Lovers, especially those who are under strict control, get a good excuse to go out, feigning to go for condolences; meanwhile they will meet their regular partners there or get new ones. A respondent captured the scenario in this way:

There was a time, we went for a funeral, and there was a video show with such scenes, a boy was moved to a point of trying to rape a girl if not for the intervention of other people (Mhoonum, Female; 32 years).

The funerals are organised according to the Christian tradition as most of the population are Christians, but the issue here is the swift advantage taken by lovers, who turn funerals into meeting arenas. This phenomenon is becoming noticeable and those who are suspicious of their partner(s) stalk even when they are aware that their partner has attended a funeral ceremony.

9.2.1.3 Schools

The young adults, who have been sent to school to study, take advantage of the learning environment to foster sexual relationships behind the watchful eyes of parents and the authorities. Though there are attendant consequences, they still engage in the behaviour. The following statement illuminates the issues:

My uncle's son was in year 4 in the secondary school, he impregnated a girl there, and his father has married the girl for him and he is no longer going to school. His father said he cannot be feeding both of them and at the same time paying his school fee (Tarpine, Male; 31 years).

Another young adult put the issue this way:

Some of us that are small and still in school, when we become pregnant, we dropped out of school. Sometimes when you try to abort, it leads to death. So if you are afraid of death, you end up giving birth as single parents, then you look like a married woman while at your parents' home. The boys are sometimes compelled to marry when they impregnate a girl, so they drop out of school due to lack funds for maintain a wife and going to school. It brings backwardness (Wantorchongu, Female; 21 years).

It can be inferred that several other meeting places or areas of engagements such as conferences, churches, offices and so forth could be used by lovers as clandestine meeting places.

9.2.2 Drinking Places

An average drinking environment (bar, club, and restaurant) in the various study areas have drinks, meals, music (stage performance or musical instruments) and various sellers of different articles who come there to look for customers. With such a plethora of activities, people go to drinking places not necessary to drink but for other things as well. These places turn out to be meeting points for lovers. One of the respondents has reported thus: Drinking places are good for meeting women; when you go there, your parents and other people will think you have only gone there to drink but you do other things as well. There are those who are selling meat, melon and other things. You buy something with them and also discuss issues of love. If it is a lady that drinks, you buy beer for her and sit together to drink. When you drink, you are no longer shy to request for something. This is what happens at these places (Tyosoo, Male; 27 years).

A young woman, Itikwase, provides a graphic description of the negotiation of sexual relationship at a drinking place this way:

In drinking places, the man will offer the woman drinks and later, the man will call the woman by the side, and say "I love you, all this while that I sat there, I was just admiring you; so I want to tell you something". Then the woman will pretend as if she does not know what the man wants, but as the man continues to talk everything will go well (Itikwase, Female, 22years; Married)

Some married individuals who patronise drinking places get into problems with their spouses. There are also instances where the scramble over girl friends in such places leads to open confrontation. One the respondents reports on the issue in the following statement:

Drinking places are often used by lovers. Some women have been divorced as a result of this. Some men will come and bring a married woman to a drinking place; they will eat pepper soup and also get a room to rest. In doing all these things, they forget themselves there. When the woman comes back and meets her husband at home, it becomes a serious problem and it leads to divorce. Some men would want to 'collect' others girl friend at a drinking places; it also leads to fighting and sometimes death of someone (Tardoo, Male; 21years; Single).

Drinking places have made it easier for people to meet the opposite sex and some negotiate multiple sexual relationships; thus aggravating the problems of unsafe sexual behaviours. Kwasehemba describes the issue thus:

Beer parlours have increased the rate of infidelity. People who find it difficult to meet the opposite sex take opportunity to do so at beer parlours and hotels. Some ladies will wake up and dress in trousers that are cut in four sections and sit at beer parlours waiting for men to buy fried fish and beer for them. They will drink with this man and there after another person, making love with them (Kwasehemba, Female, 30years; Married)

Some individuals believe that Ogogoro (a type of alcohol) can increase the potency of a man to have sex, and if such a belief exists between partners, they encourage each other to drink Ogogoro in order to have sex. The following comment captures this believes:

When I was still doing that life, we will sit in drinking places and invite women passing by to come and drink with us, and when they come, we drink and also made friends. There is a woman who said her husband is stronger when he takes Ogogoro. The man also confessed that Ogogoro makes him stronger to have sex (Torhemba; Male, 54 years).

The drinking places are also points where individuals learn new things about sex; those who are drunk discuss issues of sex without restraint. Ngodoo says:

Each time I sit in drinking places, I hear men and women who have taken alcohol discuss issues of sex and so people learn new things about sex in such places. They don't have control when they are drunk, they say anything. This is also a serious problem (Ngodoo; Female; 60 years)

9.2.3 Hotels

Hotels provide accommodation for secret sex especially for married individuals who are afraid to take other partners to their homes because of their spouse. Wantomdoo reports that:

The hotels have helped many people commit adultery. They will tell the wife that they are going to Lagos, but they will not go to Lagos, instead they will go to a hotel with another woman, spend the whole time they said they stay in Lagos there, and when they are satisfied, the man will take his car from where he has hidden it, and come home as if he had gone to Lagos. He will tell the wife that he is just returning from Lagos. This is the roles of hotels in this problem. The young people are also doing it (Wantomdoo, Female; 35 years)

Kwasevave, expressing a similar view to Wantomdoo about the influence of hotels on illicit sex says those from responsible families who are afraid to be seen in public, engage in illicit sex to the hotels. She reports the matter in the following words:

You see, if there are no hotels, some people will find it difficult to have sex, because some are many in a room where they live. Some find it difficult to go to people's houses for the fear that they will be seen, and it will become an open issue. Married women and young women from responsible families are afraid to go to people houses for such things but they go to hotels instead (Kwasevave, Female, 30years; Married).

Due to the fact that very few families go on holidays to the hotels in the various areas, several people believe that hotels are meant for illicit sex:

Though hotels have been built by the owners for their needs and commercial purposes, people use it to sleep with girlfriends. It is very hard to see families sleeping in hotels, it is usually a boy or girl friend thing (Kwasehembe, Female; 30years; Married)

The phenomenon of having secret sex in the hotels has brought crisis in some families leading to divorce. Tarpine reports on the issue this way:

Many people have secret sex in the hotel. My younger brother is married but he takes another lady to a hotel; people have seen that and have reported to the wife. As I am talking with you, the woman is no longer with my brother. Hotels are a big problem (Tarpine, Male; 31 years).

As a result of the roles of hotels, some individuals resent anything to do with them. Nomdoo, says:

Hotels are the worst. Beer parlours are better than hotels. A man will take your wife to the hotel and sleep with her there, and come out. You would not know. They will come and even sit with you. This is also very bad (Nomdoo, Male; 35 years).

9.2.4 Pornographic Films

The home video has become popular in Nigeria, and it is owned by almost every household or within the neighbourhood. Nollywood, a film producing industry in Nigeria produces films in local dialects and in English that are watched throughout the country. Some of films are sometimes marked 'only for adults' because of their contents, but they are sold in the open market to all ages. When people view scenes containing sexual messages, they are spurred to sexual engagements.

The children are also affected as they learn about sex at the wrong age. Itikwase points out the problem this way:

Pornographic films are causing serious problems. I know of one small boy watched a film, he called his sister into the room and wanted to do what he saw in the film, so the girl ran and reported to her parents and he was beaten. It creates sexual urge even among adults as well (Itikawse, Female; 22 years).

The young adults, especially those that are single, have strong sexual urge when they watch such scenes. Torvave says;

When you are watching films and you see pornographic scene, you will notice something "standing up" and if there is a women close by you will have sex. It is not good (Torvave, male; single; 22 years).

While a young female adult expresses her dilemma this way:

Some films with pornographic scenes cause sexual urge. When you are watching film and you see such thing, it send message to you and if you don't have strong self-control, you will go and have sex (Wantyohemba, Female; single; 23 years).

9.2.5 Cultural Norms

Women are not allowed to practice family planning without the consent of the husband or their male partner. Both the woman and her partner will have to agree to use condoms or other methods of family planning. However, smart women do practice one form of family planning or the other, without the consent of the male partner, but not without reprisal if the male partner discovers it. Mhoonum put the issue this way:

It is not right for a woman to do family planning or use condoms without the consent of the male partner. Some women who have done this secretly have encountered problems. Some women are even beaten and the man will insist that she must clear everything she had done before coming home (Mhoonum, Female; 32 years).

Disagreements over the use of condoms or family planning between married individuals or sexual partners have caused crisis that sometimes leads to divorce. Women who have practiced family planning without the consent of their spouse are regarded as stubborn. The patriarchal attitude is reflected in the following statement:

If the woman wants family planning, she can discuss this with the husband and they can then to do it. But if the husband does not want it, she should not do it; that is stubbornness. I know of a woman who had three male children with her husband, she did tubal ligation against the wish of the husband, thereafter the woman became sick and as I am talking to you, the woman is dead. So it is not good (Nomdoo, Male; 35 years).

Procreation is important in almost every marriage in the research areas, thus, the women are careful in practicing family planning without the consent of the husband, because. If it is discovered that non-conception is as a result of family planning, there will be crisis that sometimes would lead to divorce. A respondent says that:

I know some women who are doing family planning secretly, but there are always problems when the man knows it. There is time when the husband expects conception but it does not happen, he will try to find out what is the problem. If it is discovered that the woman is doing family planning, it becomes a serious issue. Some people can settle the problem but for others it leads to divorce. The men are usually not happy when such things happen (Kwasevave, Female, 30 years).

In corroboration with what other respondents have said on the issue of procreation and family planning, Kwaseseer reports that;

Some women can control themselves but those that are married cannot take decision about sex and family planning without their husband's consent. The men want children, so if a woman is doing family planning without their knowledge and they come to know, it leads to crisis and divorce (Kwaseseer, female; 38 years).

Married women who are practicing family planning without their partner's consent are seen to be courting infidelity as illustrated by the following statement:

Married women are not free to practice family planning. Those who have done it secretly have encountered problems. The men think that women who are practicing family planning secretly are having secret sexual relationships with other men that is why they are doing planning to avoid pregnancy and problems that may come out of it (Wantyohemba, female; 23 years).

Young adults who are not married are not expected to have sex and, thus should not be seen with condoms or practicing family planning because it is an indication they are having secret sexual engagements. The following statement explains these norms;

Women don't have the rights to practice family planning without the consent of the husband because they are couple; even though family planning is a good, she must do it with the consent of the husband. If my wife does that, I will not be happy. Those single are not expected to have sex, so if you hear anything about sex among them, you are not happy (Torhemba. Male, 54 years).

9.2.6 Poverty

There are high levels of structural poverty in the research sites and it has affected the young adults and the older individuals. The young adults sometimes lack the funds to pay for their school fee, and there are instances where they lack basic needs such as food, soap, clothing and other demands. This lack of basic needs spurs unpleasant sexual relationship for the purpose of satisfying these needs. Wantorchongu recounts the plight of young female adults who lack the funds to pay for school fees in the following statement:

Most parents here are not rich, so when their children lack school fees especially the female ones, and when there are people who are approaching you, you look for help from them. Sometimes you don't like what is happening but you are compelled to do it. Some of the men also are not rich and are lured by women who are rich to have relationship with them (Wantorchongu, female; 21 years).

Kwasedoo narrates how her mother denied her of some basic necessities when she was still very young and the effect of that denial on her sexual debut (she was induced with small amount of money. 100 kobo = 1 Naira):

I will give an example of myself. When I was very young, I was used to putting on my mother's wrapper but on several occasions, my mother was not happy with me. She saw me sitting on the floor when I tied the wrapper, she scolded me, but you can see that I am her child and when I grow up, I can buy many of such wrappers for her. One of these days, she was angry with me for using her soap to take bath. Does she expect me to be begging for soap? I don't know where she expected me to get soap for bath, under such condition, how can I resist a boyfriend who will be giving me kobo, kobo. I will be involved in fornication. This is really difficult (Kwasedoo, Female; 24years; Separated)

Another respondent recounts her difficulties as a single parent and how she gets into relationships in order to satisfy them;

My sister was staying with me, so I gave her money to start a business because if she lacks something, she can go to meet men to give her something. Poverty is not good, it leads to infidelity. I would like to give an example about myself; I am a woman, if I don't have soap, food, cream, and I pay my children school fee. These are my needs, and when I treat someone very well they help me (Wanhile, female; 45 years).

For yet another respondent, poverty leads to adultery, and if restraint is not exercised, it can even lead to stealing:

Poverty can lure a woman to commit adultery. A man will tell you that if you are with him, he can buy clothing and many things for you. So even if you don't love the person, you will just do it so that you get what you need. Sometimes if you are not careful, you can steal because of poverty. Men also do it. They love women who are rich, so that if they are in need of something, the woman will provide. Indeed poverty can lure people to do unusual things (Wantomdoo, Female; 40 years).

9.2.7 Young Adults

Many of the young adults below the age of 25 years are sexually active. Given the cultural requirements that the young people should not have sex until they are married and the freedom they sometimes get while going to school or some other places, they engage in risky sexual behaviours against the advice given to them by the parents. Kwasedoo describes the sexual behaviours of young adults in the statement below:

What the young people are doing about sex is very bad. When we were young our parents told us that sex before marriage is bad, because it will bring diseases and other serious problems. But now the young people say they know better and can even advise their parents. They don't take advice any longer. They sleep everywhere, so they take girlfriends and sleep with them there. They don't understand that what an elder can see sitting down, they cannot see it standing up (Kwasedoo, Female; 24years; Separated).

Some of the young adults engage in sexual relationships with married individuals and risk been caught and prosecuted or harmed. Wanbern states how a young male adult was caught having sex with a married woman by the husband: The young people are sexually active. Though some are married but because of poverty, they are unfaithful. Yesterday, a man travelled away from home and another boy came and was sleeping with the man's wife. The man came back and knocked at the door and the wife did not want to open the door. When she finally opened the door, the boy was inside. The boy said he only came to watch television. The man asked the boy to tell him the type of television he was watching that there was no light inside the house. The man locked them inside the house and went back. When it was day break the man sent the woman away to go and marry the boy (Wanbem, Female, 26 years; Married).

Due to risky sexual behaviours, some of the young adults have been infected with HIV and have dropped out of school. They are suffering from sicknesses and cannot any longer take good care of themselves. Kwaseseer reports the issue in the following statement:

There is high promiscuity among the young people. Some of the ladies have HIV and it is difficult for them to give birth. It is better now because the doctors are managing people to give birth. The boys who are sick find it difficult to do anything. They have lost their strength. They can even have sex and some of young people infected with HIV have dropped out of school (Kwaseseer, Female; 38 years, Widow)

Some of the young adults have destroyed themselves and are a burden on families and the society as captured by one of the respondents:

The young people are misbehaving seriously, having sex was meant by God to be in secret but what they are doing now is as if they will do it in the open like the animals. Some of them have destroyed themselves, they have no future and some are infected with diseases (Kwasehemba, Female; 30 years; Married)

9.3 Qualitative Findings on Sexual Motivation Variables

This section will focus on peer group or sub-cultural influence, the need for money and other items, and procreation.

8.3.1 Peer or Group Sub-culture Influence

Apart from the influence of structural poverty on sexual behaviour, there are influences from either the peer group or sub-culture that motivates individuals to engage in sexual relationships. There is group or sub-cultural pressure regarding beauty amongst the women. The culture is strong and competitive, thus many women desire high quality soap, cream, jewellery and beautiful dresses:

For the women, they have several needs. They like beauty but some men are very stingy, and they don't give their wives money to take care of themselves. So they are attracted to other men who want to supply their needs; so that the little they get from the husband is added to what the other man outside is giving. Some people don't give their wife anything at all; they are satisfied once they are paying the children's school fees. So if another man comes beckoning to the wife with promises to help, they succumb easily (Kwasehemba, female, 30 years).

The desire to appear neat and look beautiful and attractive make women assist others to have sexual relationship to raise the funds to satisfy the needs for soap, cream, beautiful dresses and other items. Ngodoo narrates her experience with older women in the following statement:

When I was a young woman, the older ones lured me to have male friends who will give me the money to buy soap and beautiful dresses; women are still doing it. Now that people want to appear neat and travel to different places, women are having such relationship to get money to buy clothing and other things they need. Men also have rich women to help them settle some of their problems (Ngodoo, female; 60 years).

Torvave describes the influence of peer group on negotiating sexual relationships:

People just go to drinking places whether they have money or not. When they get there, they get others to buy drinks for them. Men will buy drinks for friends and the women that are there. They will get drunk and move to somewhere to have sex. Both men and women are involved. This is the problem of drinking places (Torvave; Student; 23 years; Single; Male)

9.3.2 Money and Other Needs

The desire for money and other needs have influenced individuals into mixed-age and social status relationships. The younger and less privileged individuals are going for the older and richer ones, in order to satisfy these needs. Tarpine describes the issue in the statement below:

A woman who lacks transport fares, school fees, food or clothing can look for a man to give money to her. For men, it is money. I have a friend who is befriending an older woman for money. He has his wife, but he is with that woman. He said the woman gives him not less than N10, 000 a week. For several people, it is because of money (Tarpine, male; 31 years).

Similarly, Kwaseseer describes her predicament and motivation for sexual relationship in the following statement:

I am also affected by poverty. Now that I don't have husband, when I need something and I don't get it, I feel like going to someone who has been approaching me in order to get it. I don't feel happy when I need something and the person I love cannot provide it. It is true that poverty can influence infidelity. Men too look for rich women who can help them when they need something. I have witnessed several crises because of these issues (Kwaseseer, Female; 38 years)

8.3.3 Procreation

Procreation is important in the sexual relationships, and it one of the reasons why women are not allowed to practice family planning except with the consent of their partner. Wanbem indicates the desire in her statement:

Some women use family planning without the husband's consent, but when they know, it becomes a problem. If I were a man, I will not accept such thing because I have married the woman to have children not to practice family planning without my knowledge (Wanbem, Female; 26 years).

Equally, Wantorchongu has corroborated the views of Wambern by stating that procreation is an important motivation for relationships. She states that:

The women who are married don't have the right to practice family planning because of procreation. But for the single ladies, it is different. When your boyfriend notice that you are using family planning, they don't like it but it is better to avoid the problem that will arise when you are pregnant (Wantorchongu, female; 21 years).

Married men are curious about having children. It is almost a universal motivation for sexual relationships in the research areas, so they monitor their wives closely, and expect conception

and birth within an estimated period. If their expectations have not been realised, they conduct personal enquiries to know the reasons behind that.

9.4 Qualitative Findings on Sexual Performance Variables

The issues to be addressed under this section are: multiple partners having sex while drunk and condoms usage.

9.4.1 Multiple Sexual Partners

Apart from those practicing polygamy, there are those who, by virtue of poverty, enter into other sexual relationship in order to satisfy certain needs; and for some, it might be greed. Kwasedoo responds to the issue of multiple partners in the following manner:

It is a common practice among men and women, young and adults; they don't have one partner, even during courtship. The women think if this partner does not meet my needs, I can get it here or there. For the men I don't know whether it is gree; one partner you are not satisfied, two partners you are not satisfied, three partners you are not satisfied, I don't understand. Among married individuals, they do it. It is common, I cannot hide it (Kwasedoo, female; 24 years).

Whilst Kwaseseer, points out that, the behaviour cuts across those living with HIV and Christians:

Many people are still keeping multiple partners. They are doing what they want even those who are HIV positive. They hide and are busy doing their things. They move from partner to partner looking for help. They don't have self-control including the Christians (Kwaseseer, Female; 38 years).

Similarly, Tardoo points out that wedding in the Church is not the solution to infidelity. It is expected those who have wedded in the Church should respect their marriage vows, but they don't. However, they are more secretive than those who have not wedded in the Church.

Many people here are now having one wife, others two wives, those with three wives are not many. Several people are now being married in the church. But this does not mean that they stick to only one partner. They are Christians so they do it (have affairs) in secret unlike others who do it in the open (Tardoo, Male, 21years, Single).

For Itikwase, she is compelled to bear her partner's infidelity, but her serious concerns are the family income that would be expended on such partners and the health risk involved. She expresses her displeasure as reflect below:

Men are having several sexual partners. I have problems with my husband on this issue. I don't understand his movements, but when I complain, he gets angry. I am not happy. I don't want my husband to look for other women because he may get disease and infect me, he may use our hard earned money to buy things for other women (Itikwase, female; 22 years)

9.4.2 Sex while Drunk

It has been mentioned elsewhere that there are individuals who hold the belief that alcohol increases the potency to have sex; thus, they will go and take alcohol, some get drunk before having sex. Ordoo says:

Drinking places have contributed to the problem of fornication. Men and women alike drink alcohol; when some women get drunk, they will sleep with them, and sometimes they don't even know what they are doing (Ordoo; Student; 19 years; Single; Male)

.Whilst Wanbern narrates the desperation of a drunkard who wanted to have sex but had not gotten a partner, so he strayed to her house and wanted sex.

A man drank alcohol and came and knocked on my door. I was sleeping, so I just got up and opened the door. The man said that he wants to sleep in my room. I said I don't know you, so how can you sleep with me now? The man said he had been seeing me. But I said you have not spoken to me about this thing before. The man now gave me 1000 naira that I should allow him sleep with me, but I refused. Suppose I accepted the money, I would have had to sleep with the man (Wanhile, Female; 45 years).

9.4.3 Usage of Condoms

There are difficulties in negotiating condoms usage between sexual partners. Whereas one partner may be predisposed to the usage of condoms, the other might not. The issue of condoms abhorrence include those living with HIV. A respondent identifies the problem in the following statement:

Some men don't like using condoms. There is a man in my place, he is positive together with his first wife and both of them are taking drugs. He has married a second wife and he is not using condoms with the second wife and the second wife does not know that the man is positive (Wanbem, Female; 26 years)

9.5 Qualitative Findings on HIV Variables

Stigmatisation of those living with HIV is still rife, though there is awareness about the sources of spread of the disease in the areas. However, sexual intercourse constitutes a major source of infection, therefore HIV positive status is considered as a product of infidelity. Thus, most men who are sero-negative status find it difficult to accept women who are HIV positive. This issue is captured in the statement below:

You see HIV is contracted through sex, so for women who have HIV and their partner don't have it; it will take the grace of God for the man not to divorce the woman, because it is seen as a product of infidelity. Neighbours discriminate against HIV patients, if you drink water in a cup, they will not use it; they will not eat with you. If you use a sponge for bath, they will not use it. When you are with them, they see you as a different person just like they used to see slaves in the ancient times (Kwasehemba, Female; 30 years).

Relations, friends, and neighbours avoid those living with HIV in a surreptitious manner believing that they might want to deliberately infect them:

We avoid people with HIV, we don't want to talk to them, or eat with them or wash their clothes or sleep with them because we will be infected; but we do this secretly. If they know that you are avoiding them, they will not be happy. Some people are wicked; they will want to infect others, so we are afraid because we don't know the intention of the person (Wantyohemba, Female; 23 years).

There are those who don't want to mingle with HIV positive individuals. They avoid drinking water in the same cup or sleep in the same bed with them; just on very rare occasions, they might eat with them:

I don't want to be with those infected, but I go for tests very often so that if I am infected, I will know. I will not sleep in the same bed with an infected person. I will not drink water in the same cup with the person, not even my husband, but I can eat with the person, if the person is my relation (Itikwase, Female; 22 years).

Due to stigmatisation, HIV positive individuals are afraid to disclose their status; they avoid public places and drug collection centres, in order not to be seen by relations, friends or neighbours collecting antiretroviral drugs.

Our brothers are senseless. From the beginning of the world, there is sickness; and from time to time people fall sick and take drugs. There is no sickness that you would not take drugs. Sometimes you will be well but the following day you will be sick and take at least Panadol. But when someone is infected with HIV, people start discriminating against the person. They will not eat with the person; they will not drink water in the same container with the person. But what I know is that the sickness is transferred through infected blood. How can one get it through eating? I feel those people should be kind to those infected with HIV. It is like a curse. Some people have died because of this. People are afraid to disclose their status because so and so person will see them taking drugs, so they have refused to take drugs and they have died (Kwasedoo, Female; 24yeras; Separated)

In corroboration of with what Kwasedoo has reported, Wantorchongu says people discuss those living with HIV. They point fingers at them each time they are passing and avoid the seat where any of the people living with HIV have sat. This stigmatisation is captured in the following words: Those who have HIV are suffering; people avoid them. Sometimes when they are passing, people discuss them and point fingers are them, and avoid sitting where they have sat. They refuse to eat from the plates used by them. This has made many of the HIV patients hide their status and avoid centres where they are given drugs, so that they will not be seen collecting drugs (Wantorchongu, Female; 21 years).

Some HIV positive individuals who don't want to be seen collecting drugs travel far distances to do so, where they perceive that they would not be known.

Some years ago, there were no drugs for HIV and so people who got the disease where highly discriminated. But now it is better. People now feel that the disease is not a death sentence. They advise others to look for medical care if they are infected. However, people are still going to distant centres to collect drugs, so that they will not be seen by their neighbours (Nomdoo, Male; 35 years).

As a result of stigmatisation, some individuals living with HIV are depressed, they isolate themselves and die.

The problem of avoiding HIV patients was very high; it is a little better now but the problem is still there. The people that I know who have HIV have their cups for drinking water; some people don't like eating with them, though other people shake hands with them; some of them who have HIV don't like to go to where there are people and even to attend church service. They are depressed. Many of them are dying because of that (Tarpine, Male; 31 years).

However, it the desire of many that those living with HIV should be loved and cared for, just like those not living with the disease.

People should stop discriminating those infected with HIV. Apart from giving drugs to them, they should also help them with food; because those infected are afraid of discrimination, people move to very far places like Makurdi and Abuja to collect drugs; the government should help (Kwasedoo, Female; 24 years).

9.10 Summary

The qualitative findings have provided further insight into the quantitative deductions by providing intricate interactions between sexual capacity, sexual motivation, sexual

performance and HIV variables, and sexual behaviour. Sexual negotiations are complex and can occur in markets, funerals, schools, drinking places and other similar spaces, whereas most sexual encounters take place in residential units and hotels. Pornography and cultural norms are other factors that facilitate sexual relationships.

The group desire of beauty amongst women which translates into the need for soap, cream, beautiful dresses, jewellery and personal needs as well as poverty, peer influence and procreation, are strong motivations for sexual relationships. Sexual performance sometimes involves the usage of alcohol, and often leads to unprotected sexual encounters even amongst sero-discordant (one is HIV positive while the other is not) partners. Multiple sexual partnerships are common and involve both females and males, young adults, adults as well as and married people.

Young adults are sexually active. They engage in risky sexual behaviours against the advice of their parents. Thus, some of the young females have become pregnant and others have been infected with HIV. Due to the social, economic and health challenges posed by pregnancy or HIV, the affected young adults drop out of school. Some can no longer take good care of themselves because they are suffering from opportunistic sicknesses. They now constitute a major burden to their families and the society.

Finally, stigmatisation of those living with HIV is rife despite the awareness of the sources of spread of HIV in the areas. It is the reason why those living with HIV avoid drug collection centres or travel long distances to collect drugs where, presumably, they are not known. It is also the reason for self- isolation, depression and sometimes death amongst those living with HIV.

CHAPTER TEN

DISCUSSION OF QUALITATIVE AND QUANTITATIVE FINDINGS

10.1 Introduction

This chapter will focus on the discussion of quantitative and qualitative findings in chapters 8 and 9 respectively. According to NACA (2012) report, the HIV epidemic in Nigeria, is the generalised type with bulk of the new infections (42%) occurring amongst people who are considered to be involved in 'low risk' sexual relationships (those cohabiting and the married). The report adds that there is low condom usage amongst this group and infection might be as a result of previous or present high risk sexual behaviour by one of the partners. The high risk groups such as female commercial sex workers, injecting drugs users and men who sleep with men (very low population) contribute 23% of the new infections. Given the above scenario, the findings will be discussed under two broad sections: (1) within the context of the study area; (2) within the context of the existing literature on unsafe sexual behaviour and HIV.

10.2 Discussion within the Context of the Study Area

The discussion will be undertaken in relation to the theoretical constructs of sexual capacity, sexual motivations, sexual performance, HIV, and sexual webs variables.

10.2.1 Sexual Capacity of the Individuals

The individual, family and structural factors that influence sexual intimacy in the area are: (1) relationship status; (2) family support; (3) poverty; (4) cultural norms; (5) drinking places; (6) hotels; (7) pornographic films; (8) schools; (9) markets; and (10) funerals.

There is structural poverty in the area and those who are rich, both men and women, have strong sexual capacity. The older and richer men attract younger less privileged women; while the older and richer women attract the young and less privileged men. Both married and single alike are in such relationships. The women justify their action by implicating poverty and the need to buy soap, cream, jewellery, clothing and several other needs. They, however, add that the numbers of sexual partners kept by men indicate high levels of greed rather than the mere desire to get money from such relationships and satisfy pressing needs.

Indeed, poverty reduces the capacity of the individual to maintain very high sexual intimacy with a partner. However, not all partners with low income have lower levels of sexual intimacy. In those partnerships, poverty has not transformed into pressing needs that

would require an illicit sexual relationship to satisfy. Relatively, the men have more opportunities to raise funds than the women because the society is patriarchal, predominantly agricultural, and land inheritance is through the father to the son(s) and not the daughters. The daughters can own plots in the towns but not family farm lands.

The prevailing cultural norms diminish the capacity of the women to use condoms or practice other forms of family planning. They require the consent of their male partners to practice family planning, without which, it is considered as stubbornness or away of concealing infidelity or an attempt to forestall procreation, which is a near universal motive for sexual relationship in the area. On the other hand, the norms enhance the capacity of the men to seek another partner, if the primary partner has not been able to procreate. Thus, some men under the guise of procreation keep more than one sexual partner.

Relationship status is a predictor of sexual intimacy; those single or cohabiting exhibit less capacity to maintain very high intimate sexual relationships than those who are married. Young female adults are vulnerable due to lack of financial resources, and the desire for courtship relationships that may lead to marital unions. Some men initiate courtship relationship with women, and after some persuasive occasional sexual encounters, leave for other women. It is required that those who are married should maintain fidelity in their relationships; however, some partners are unfaithful, thus, diminishing the sexual intimacy.

Similarly, those who are still supported by their family members have less capacity to maintain very high intimate sexual relationship than those who provide for themselves with no assistance from their relations. This sound plausible due to the fact that those still supported by relations might not be fully employed, with less income, and need assistance not only from family members, but from others who might be sexual partners.

Another interesting dimension of sexual behaviour is the capacity enhancement in drinking places. Drinking places are a beehive of activities such as drinking of alcohol, selling of roasted, fried or spiced meat, and other articles; dancing or playing of music, which are used as meeting arena for lovers. Regular friends make appointment or some individuals get new partners at these places. Certainly, they are places where individuals display their capacity to finance relationships by buying drinks, meat, and other things on sale, for their partner or would be partners. They sit down and drink or eat meat while negotiating for sexual relationship. These places are also good for those who are learning the act of dating, as sexual issues are discussed without restraint, especially when individuals get drunk. Some

individuals believe that Ogogoro increases the potency to have sex; hence they consume the alcoholic drink with the aim of having sexual encounter. These places increase the capacity of both women and men, single, cohabiting, and some married individuals for illicit sexual behaviour, but diminish sexual intimacy.

In a similar way, hotels provide accommodation for clandestine sex among married individuals, who are afraid of their spouse to take partners to their house. Also some young adults who are under strict control sneak into the hotels to have sex at any available opportunity. Hotels enhance the capacity of the individual by providing accommodation for illicit sex and thereby undermining intimate sexual relationships amongst formal unions whose partners are involved in such unfaithfulness.

Furthermore, market places are good meeting arena for those who would like to engage in secret sex. The prospective partners add 'sex' to their list of items which they would like to 'buy or sell' while heading to the market. They meet at the market as scheduled (for regular partners) and further negotiate the relationship. These illicit sexual behaviours have caused anxiety in formal unions, who are having the problem of trust, and are suspicious of the other, especially when he or she had gone to the market. This has equally impacted negatively on sexual intimacy.

Another issue is the swift advantage taken by those who would like to engage in secret sex by turning funerals organised by religious bodies into meeting arena. These individuals feign mood of condolence as they go to funerals; but the mood soon disappears into love affairs as they sight each other at the venue, or get someone to negotiate new relationship. The young and old, single, cohabiting, and some of the married ones are into this act which enhances the capacity for illicit sex, but erodes very high sexual intimacy in formal unions.

Schools also inadvertently provide grounds for illicit sex. Married individuals meet other individuals there, and form new sexual relationships. Sometimes young women get pregnant and drop out of school, without knowing exactly who was responsible due to multiple partnerships. In a similar way, the unfaithful married partner may drop of school if caught, especially if the cheated partner is the one sponsoring the education of the unfaithful one. Thus, the school environment enhances the capacity of married individuals for illicit sexual engagements or multiple partnerships among the young adults on one hand, and it weakens sexual intimacy amongst formal unions or with a primary partner on the other hand. Pornography has subtly crept into home video through films marked 'only for adults' but sold in the open market to all ages. Some of these films are not particularly about pornographic, however, but contain scenes with sexual messages that have impacted strongly on both the young and the old. When such films are either watched in the household or neighbourhood, individuals get new ideas about what they want to implement with sexual partners. Hence they crave for sexual encounters with regular partners or with new sexual partners. With the existing roles of the hotels, funerals, markets, schools and other places in aiding illicit sex, such craving are sometimes satisfied. Home video has its own fair share of undermining sexual intimacy among formal unions or regular partners.

10.2.2 Sexual Motivations amongst Sexual Relationships

The motivations for sexual relationships that influence sexual intimacy in the area are: (1) favours; (2) period of staying away without primary partner; (3) peer or group sub-culture influence; (4) money and other needs; (5) procreation. The more the favours a partner receives from the other, the higher the levels of sexual intimacy. These favours are in the form of helping with farming work, jobs, sponsorship, gifts and several other things. Those who are favoured get more interested in the relationship. However, if the relationship is an illicit one, it may weaken the intimacy in the formal union or with the primary partner.

The period of 'stay away' from primary partner influences sexual intimacy. The longer the period a partner stays away from his or her primary partner, the lesser the sexual intimacy. The period of loneliness, if long, gives room for secret sexual engagement. Both men and women entered into relationship to break the loneliness.

In addition, group sub-culture of the desire to be beautiful and attractive amongst women, which is strong and competitive, has translated into material needs. A lacks of these needs is a strong motivations for sexual relationship with men for the purpose of satisfying them. Some of the married women assist each other to engage in illicit sex to meet these needs rather do without them, while down playing the reprisals from the men, if they are caught. This has reduced the sexual intimacy amongst formal unions or primary partners.

Furthermore, men also constitute peer groups, who may be drinkers; they go to drinking places for appointments or to meet new friends. They assist each other to engage in illicit sex. Some women who have such husbands wait for them to leave the house first; as soon as the man had gone, they also leave for their 'appointments'. The hallmarks of such acts are crisis in formal unions which sometimes leads to divorce, despite the impending consequences on the children. Sexual intimacy is completely destroyed leaving the partners more prone to sex with multiple partners.

Despite the material gains, money is needed to satisfy certain needs that the individual may not want to disclose. The desire to have money is a strong motivation for sexual relationships, but those who have yielded to the desire are faced with the problem of meeting the requirements of multiple relationships, hence there is reduction in levels of sexual intimacy in formal unions or with the primary partner.

Procreation is very important in almost all the formal unions. It is one of the motivations for sexual relationships. Failure for a woman to procreate may weaken the sexual intimacy, because the man will look for another partner who would procreate. It is also one of the reasons given by several individuals who are keeping multiple partners.

10.2.3 Sexual Performance amongst Sexual Relationships

The sexual performance predictors of sexual intimacy are (1) number of sexual partners; (2) number of wives; (3) sex while drunk; (4) condoms usage.

The number of sexual partners is negatively related to sexual intimacy; the more the number of sexual partners kept by the woman or the man, the lower the levels of sexual intimacy. Keeping more than one sexual partner at a time by a woman in whatever form is not allowed. Equally, young adults are not expected to have sex until they are married, so, the reality of young adults keeping multiple partners is what several people find difficult to accommodate. Whereas a man is allowed to have more than one sexual partner in formal unions, he is not allowed to indulge in other secret relationships. The wife or wives can sue the husband for infidelity; however, such cases are usually withdrawn on the ground of family peace. Given this scenario, both the man and woman are not expected to have secret sexual relationships. Nevertheless, both men and women keep secret partners; while the women justify their unfaithfulness by implicating poverty, the men are seen in the eyes of the women to be greedy; that the men keep several partners not only to satisfy lack of money but to display sexual egoism. Irrespective of the reasons for keeping secret relationships, it diminishes sexual intimacy, leads to crisis and sometimes divorce.

Similarly, the higher the number of wives, the lower the levels of sexual intimacy; although the men are allowed to have more than one partner in formal unions, having more wives weakens sexual intimacy between the husband and his wives. There is contest amongst the wives for the husband's attention which makes it difficult for him to equally give each of them, the desired attention. The consequence is the resultant low sexual intimacy between him and the women. The women sometimes look for secret relationships to fill the gap left by the husband, and also enjoy the money and other gifts from ensuing relationships. The consequences are usually crises which sometimes lead to divorce.

There is also the belief amongst drinkers that Ogogoro increases the potency of having sex. Thus, individuals not only have sex while drunk, but there are those who out of conscious efforts drink alcohol to have satisfying sex. The more the individuals engage in sex while drunk, the lower the levels of sexual intimacy. The peer influence on alcohol drinking and the pursuit of sexual pleasure enhances multiple sexual relationships which erodes sexual intimacy.

Furthermore, the values of procreation in marriages have made negotiation for condoms usage amongst formal unions difficult especially on the part of the woman. Women who are disposed to condom usage are seen to court infidelity; hence they are using condoms for protection against disease or pregnancy. In a similar manner, the young adults are not expected to have sex until they are married, thus, sex amongst them is mostly secretive and without the usage of condoms. Condoms abhorrence includes those living with HIV; they sometimes fail to use condoms in sero-discordant (one partner positive while the other is not) relationships. The issue of condoms reducing sexual pleasure, causing painful sex and irritation, possessing odour; being expensive and sometimes not available have contributed in keeping condom usage low. In addition to these factors that have impacted negatively on the use of condoms, there are incidences of condoms breakage and slip off during usage, which poses serious health risk to the partners.

10.2.4 HIV Issues amongst Sexual Relationships

The predominant source of HIV infections is heterosexual relationships. This has made people feel that living with HIV virus might be an outcome of unfaithfulness; hence, they devise surreptitious ways of avoiding such people. They avoid items used by the individuals such as utensils and seats, make comments which are derogatory, and avoid eating or mingling with the individuals. Despite the awareness of HIV issues and the availability of anti-retroviral drugs, people still feel that HIV is deathly and can inflict untold hardship on the sufferers, so they are not comfortable with HIV patients. Others feel that some HIV patients may, out of wickedness, want to deliberately infect those closer to them; while several individuals have divorced their partners who have tested positive for fear of the unknown. Positive HIV status diminishes sexual intimacy and can lead to isolation or divorce.

As a result of stigmatisation, several people living with HIV avoid public places, and even drugs collection centres that are closer to their place of residence, for fear of been seen by relations or neighbours colleting drugs. They feel betrayed and are depressed and some individuals may isolate themselves and die.

There are sero-discordant and sero-concordant partners, and those who don't know their partners' HIV status. The sero-concordant partners are those who are either both HIV positive or both negative, while those who don't know their partner's status are either positive or negative, giving rise to positive/ don't know partner's status or negative/ don't know partner's status relationships. The sero-discordant partners are those that one partner is positive while the other is negative. The urban-Ichongu area has higher percentage of those who are both HIV positive, and given the same conditions of unsafe sexual behaviours, HIV will spread in this area more than the other ones.

10.2.5 Sexual Webs in the Areas

The common types of sexual webs in the area are heterosexual (97.8%) with smaller percentages of bisexual (1.8%), lesbianism (0.1%) and homosexual (0.2%) relationships; their compositions range from two, three, to more than three sexual partners. They exist amongst the young adults; the adults; and between the young and the old; the rich and the poor; the married and the single; the married and the widows; the married and the divorced; married and separated; the divorced and the widows; the divorced and the separated; the separated and the widows; and several other secret sexual relationships. The more the satisfaction with a sexual web the higher the levels of sexual intimacy and vice versa. Sexual capacities, motivations and performances affect levels of sexual intimacy in the sexual webs, which give rise to higher or lower chances of HIV infections. Unsafe sexual practices are products of negotiation between the partners within the context of their capacities and motivations and, hence the different levels of sexual intimacy and either lower or higher chances of HIV infections.
10.3 Discussion of Findings within the Context of Literature on Unsafe Sexual Behaviours

Several perspectives have shaped the research orientations of scholars on unsafe sexual behaviours over the past three and half decades (see section 2.2.2, pp.10-14); despite this, the health behaviour models generally have not provided constructs to measure contextual, relational and distal factors which have impacted on sexual behaviours as reflected in the studies using political economy, cultural, and symbolic interactionism perspectives. Nevertheless, the health behaviour models' constructs have predominated theoretical frameworks for research, and intervention programmes aimed at influencing sexual behaviours (see section 2.2.3, pp.14-15).

Situating the findings from this research within the context of unsafe sexual behaviour literature will be done using the concepts of sexual webs model as in the previous sections.

10.3.2 Sexual Capacity amongst Partners

The discussion of findings on sexual capacity variables in this study, with regard to findings from literature poses some difficulties. Whereas sexual capacity variables are examined to ascertain their effect on sexual intimacy and unsafe sexual behaviours at partners level, the other studies have examined the effect of individual, family or structural (sexual capacity) variables on unsafe sexual behaviours at the individual level. For example, while poverty has been observed to reduce the levels of sexual intimacy through motivations (needs) and performance (multiple partners) in formal or primary partners sexual relationships, Onyenecho (2009) and Popoola (2013) have reported the effects of poverty on unsafe sexual practices of young female commercial workers in Enugu and Lagos states, who did not use condoms with clients, were harassed by police and stigmatised. However, the causal pathway between poverty and unsafe sexual practices has not been provided, and in addition, the focus is the individual rather than partners. The differences in term of scope, measurement, and unit of analysis between the current study and these two studies make the comparison of findings within the existing literature on unsafe sexual behaviours.

Receiving support from family members in form of money, material items or both is capable of influencing sexual behaviour by increasing the income or the material wellbeing of the partners. The immediate implication of such support is that poverty will be reduced, and hence the reductions in the desire to look for help elsewhere including other sexual relationships thereby enhancing sexual intimacy. However, scholars have paid less attention to document this variable. Sharma and Mufune (2011) report that parental support forestall early onset of sexual intercourse amongst grade 8, 9 and 10 school children in Namibia. This study has focused on young teenagers only, and does not include information on how family support (money and material items) influences sexual behaviour at the other age groups; neither is there information on what happens when family members support partners.

In a similarly way, relationship status plays a significant role in sexual intimacy in the study area; those single or cohabiting have less chances of keeping very high intimacy than the married. In the literature, individual level studies have various ways of classifying relationships status such as permanent boyfriend, casual partner; older partner (Nobelius et al., 2011); primary partner or casual partner (Amoran & Ladi-Akinyemi, 2012); steady or casual partner (Jaurez & Martin, 2006); casual partner and boyfriends (Williamson et al., 2009). These classifications reflect the differences in the characteristics of these relationships, whereas relationship status examined in this study, and consequently, their impact on sexual behaviour, which are at partners rather than individual levels.

The influence of poverty on sexual behaviour has been well documented. Several scholars have identified commercial sex work (Fitzgerald-Husek, Martiniuk, Hinchcliff, Aochamus, & Lee, 2011; Munoz, Adedimeji, & Alawode, 2010; Popoola, 2013; Stephenson, Winter, & Elfstrom, 2012), and multiple sexual partners (Dodoo et al., 2007; MacLachlan et al., 2009) as outcomes of poverty at the individual level. However, serious attention has not been given to incorporate the poverty variable in programme intervention to change risky sexual behaviour including the one in Nigeria (see sections 2.2.2 and 2.2.3). Previously, studies examining poverty and sexual behaviour were largely driven by the political economy perspective, rather than the constructs from health behaviour models which provide direct pathway between cause and effect. Hence the poverty variable seems less attractive to behaviour change programme interventions, which are mostly from psychology and public health (Fitzgerald-Husek et al., 2011; Lifshay et al., 2009)

This study using sexual webs model has provided the pathway between poverty and sexual behaviour, as earlier stated. Another distinction between this study and others is the observation that married men subtly have sex with women who sometimes appreciate them by assisting them financially. It begins with the expression of love towards the rich women and a relationship is ensued. The desire for gratification is coated in love, and it is not immediate as in the case of commercial sex, nevertheless it comes when the man is in serious need.

Furthermore, the cultural expectation of procreation within formal unions has deprived the women the rights to unilaterally practice family planning, and hence condoms usage. Condom usage is negotiated between the partners. In the event that the woman is using a form of family planning without the consent of the man, the act is construed as stubbornness and an attempt to conceal infidelity. Thus, condom usage amongst partners is low and there are enhanced chances of HIV infection for keeping more than one partner. This point further underscores the appropriateness of the unit of analysis adopted in this study. Other studies at the individual level have also observed the influence of cultural norms on gender sexual roles (Macia, Maharaj, & Gresh, 2011; Mah & Maughan-Brown, 2012; Jewkes, & Morrell, 2010); masculinity in sexual relationships (Lynch, Brouard, & Visser, 2009; Sui, Wight & Seeley, 2014); and utilisation of condoms (Rigillo, 2009). However, the relationship pathways between culture and sexual behaviour have not been provided, and the focus on the individual level differentiates these studies and the present one.

Generally, more attention has been focused on the effect of alcohol usage (Azuonwu, Erhabor & Frank-Peterside, 2011; Tumwesigye, Wanyenze, & Greenfield, 2012) on sexual behaviour, while drinking places which serve as the consumption points have evaded notice. This study has observed that drinking places in the study area serve as one of the meeting points for regular partners or potential partners. The beehive of activities of drinking, eating, dancing, and selling of assorted items draws several people including non-drinkers to these places. It provides opportunities for negotiation of sexual relationships. Apart from that, sexual matters are discussed freely by drunkards. Thus, beginners and even experienced individuals in dating practice increase their capacity for dating by learning new matters of interest. In addition, there are those who hold the belief that Ogogoro drink increases the potency for sexual intercourse; hence there are individuals who drink Ogogoro with the motive of having sex, whilst others have sex while drunk. The cumulative effects of drinking places and Ogogoro consumption are multiple relationships with low levels of sexual intimacy, and increase HIV infections. Alcohol usage is nested within the locations.

Similarly, commercial sex taking place in the hotels have been documented (Munoz, Adedimeji, & Alawode, 2010; Popoola, 2013), however, furtive sex involving married individuals, and some other individuals (young adults) who are under strict control, in hotels

has eluded the attention of scholars. The roles of hotels providing accommodation for secret sex have increased the capacity for multiple relationships and lower levels of intimacy amongst partners. Married individuals, who cannot take other sexual partners to their house for fear of their spouse, go to the hotels. The crisis that results from uncovered infidelity taking place in the hotels sometimes leads to divorce, and more exposure to multiple partnerships and chances of HIV infection.

Since the emergence of an indigenous movie industry in Nigeria that produces films in English and the local dialects, home video has become very popular. This study has observed that, though there are inscription on some of the films indicating that they are only for adults, such films are sold in the open market to all ages. Erotic scenes in these films impact negatively on children, young adults, and even the older individuals who view them to crave sex and sexual relationships. Several other studies have observed a similar impact of pornography on the sexual behaviour of individuals across the globe (Cunningham & Kendall, 2010; Baumgartner, Valkenburg, & Peter, 2010; Cameron et al., 2005; Simon et al., 2004). However, this study has observed the effect of 'passive' pornography from nonclassified pornographic films on sexual behaviours in the study area.

Institutions such as schools have been found by scholars to be one of the places where young adults enrolled for studies meet and initiate sex (Adaji et al., 2011; Mufune, 2011). This is in line with the observation in this study that young adults who have been enrolled for studies in schools engage in sex. The study also observes that those who are married or who have regular partners, while attending classes meet with other sexual partners at the school. Whereas the unsuspecting partner will think he or she is in school, the unfaithful one will move to a predetermined location for sex. It is not only the young adults that drop out of school as a results of problems ensuing from illicit sex, the adults also drop out of school as a result of infidelity, especially if the cheated partner is the one financing the study. The school environment enhances the sexual capacity of unfaithful partners to negotiate for multiple sexual relationships which lower the levels of sexual intimacy amongst primary partners and increase the chances of HIV infections in the face of irregular condom use.

The issue of open markets becoming meeting points for lovers have not been well documented. Oruonye (2011) has reported that widows and female orphans come to Taraba markets in Nigeria to sell sex. However, the issue of married individuals or those with regular partners booking for appointments with other sexual partners has not been mentioned. The study has not only observed this aspect of the phenomenon, but that, there is anxiety among partners especially when the one being suspected has gone to the market. Markets have enhanced the capacity of unfaithful partners to negotiate for sex with other partners which leads to lower levels of sexual intimacy and increase chances of HIV infections because of low condom use amongst sexual partners in the areas.

Another factor enhancing the capacity of unfaithful partners is funerals. Though the funeral are organised according to the Christian tradition, lovers have found a space for negotiating sexual relationships. The impact of traditional funerals on adolescents' sexual behaviours has been observed in Kenya (Juma, Askew et.al, 2014). By these findings, it seems funerals whether organised in the cultural way or Christian tradition constitute grounds for illicit sex which assist in reducing the levels of sexual intimacy and attendant consequences of HIV infections, given the circumstances of irregular condom use in which the illicit sex encounters occur in the areas.

10.3.3 Sexual Motivation amongst the Partners

As earlier indicated, the impact of poverty on sexual behaviour has been well documented by scholars of political economy of sexual behaviour (Munoz, Adedimeji, & Alawode, 2010; Popoola, 2013); but the pathway between poverty and sexual behaviour has not been provided. The pathway as explored in this study indicates that poverty manifests in lack of money and needs. Thus, favours which are meant to satisfy the lack of money and needs are positively related to levels of sexual intimacy; while lower levels of sexual intimacy are associated with higher levels of unsafe sexual behaviours. Where favours are lacking, there are low levels of sexual intimacy, as partners look elsewhere to satisfy their needs in new relationships. The resultant effects are multiple partnerships and low levels of sexual intimacy. It is interesting to realise that, not all low income earners have lower levels of sexual intimacy, which indicates that, in those partners, poverty has not transformed into needs that would require illicit sex to satisfy them; neither is affluence a sure insulation from illicit sex. For instance, 6.6% of the partners earning less than twenty five thousand Naira (AUD162) have very high levels of sexual intimacy, while none of the partners who earn more than one hundred thousand Naira (AUD 648) have very high levels of sexual intimacy (See Table 5.1).

The longer the period of stay away from regular partner, the higher the number of sexual partners and the lower the levels of sexual intimacy. If the period that a partner stays

away from the regular partner becomes longer, it increases the motivation for another relationship and thereby lowering levels of intimacy. A similar observation has been made among truck drivers (Atilola, Akpa, & Komolafe, 2010; Azuonwu, Erhabor, & Frank-Peterside, 2011), seasonal and internal migrants (Tiruneh, Wasie, & Gonzalez, 2015; Camlin, Kwena, Dworkin, Cohen, & Bukusi, 2014); and fishing communities (Kwena, Camlin et.al, 2013. However, these studies are at the individual level, and the relationship pathway between 'period of stay away' from partner and outcome of HIV infections has not been provided. In the present study, the period of stay from primary partner manifests in the desire for new relationships, which when enacted, results in multiple partnerships, and hence low levels of sexual intimacy. Nevertheless, the information on the impact of period stay away from primary partner on sexual behaviours from these studies can now be extended to non-migrant populations as observed in this study.

A strong group sub-culture of the desire to look beautiful and attractive, and abetting each other to coax illicit sexual relationship amongst women is another dimension that differs from the findings of other studies. A sub-culture of alcoholism (Tumwesigye, Wanyenze, & Greenfield, 2012; Hutton et al., 2008) and drug use (Mutchler et al., 2011) exists in Kenya and the United States among individuals who get drunk or take drugs to engage in sex, which is similar with the one observed in this study amongst men who drink Ogogoro in order to have sex. The support amongst women who are not under the influence of drugs or alcohol, but for the purpose of achieving beauty, engage in illicit sexual relationships illustrates the dynamics of sexual behaviours. This strong motivation leads to multiple relationships and lower levels of sexual intimacy amongst partners, and hence greater chances of HIV infections under the conditions of lower levels of condom use.

Marriage is almost a universal event in the study area and a serious motivation for such sexual relationship is the high desire for procreation. It influences sexual behaviour in two ways: first, it lowers the rate of condom usage and, second, it provides the man with the opportunity to have other relationships, if the primary partner does not bear children or has not given birth to enough number of children. The cultural perspective of sexual behaviours (Holland, 2003; Macia, Maharaj, & Gresh, 2011; Weeks et al., 2003; Sui, Wight & Seeley, 2014) have noted the influence of procreation on unsafe sexual behaviours, however, the pathway is not clear as that provided by the construct of motivations in this doctoral study. Multiple sexual relationships in the quest for children lower levels of sexual intimacy among partners and increase the chances of HIV infections.

10.3.4 Sexual Performance amongst Partners

At the individual level, Amoran and Ladi-Akinyemi (2012); Mah and Maughan-Brown (2012), and Dodoo et al. (2007) have documented the sexual behaviour of women keeping multiple partners for economic reasons, while Macia, Maharaj, and Gresh (2011); Lynch, Brouard and Visser (2009) have implicated masculinity as the reason why men keep multiple sexual partners. However, the pathway between multiple partnership, unsafe sexual behaviours, and HIV has not been stated. The findings in this study indicate that the higher the number of sexual partners, the lower the levels of sexual intimacy; and the lower the levels of sexual intimacy, the higher the chances of both partners being infected with HIV. The missing link between sexual performance with multiple partners and HIV infection has been provided at the partners' level in the present study, unlike previous studies at the individual level which have not provided the pathway between multiple partnership and outcome of HIV infections. Both men and women have been observed to be keeping multiple partners in the study area.

Similarly, Kanekar and Sharma (2010), and Tumwesigye, Wanyenze, and Greenfield (2012) have identified unsafe sexual encounters by drunken individuals, but the pathway between drunkenness and unsafe sexual practices have not been provided. The present study has observed that, sex while drunk has a negative relationship with levels of sexual intimacy. As 'sex while drunk' increases, the higher the chances of being at lower levels of intimacy; and the lower the levels of sexual intimacy, the higher the chance of both partners been infected with HIV, given the lower levels of condom usage under which illicit sexual encounters occur. Sex while drunk is nested in the types of families (monogamy, polygamy single, divorce); and significantly influences the categorical membership in the lower levels of sexual intimacy.

Furthermore, there is low condom use amongst partners including those living with HIV. Whereas this observation is due to motivation for procreation, and a tendency to perceive condom use by women who have not obtained consent from their male partners as an act to conceal infidelity, the low levels of condom use amongst HIV patients in previous studies has been reported to be a result of the fear to disclose their status (Ragnarsson et al., 2011; Roxby et al., 2013), while amongst the youths, usage is influenced by background

characteristics (Oyediran, Feyisetan, & Akpan, 2011; Mbira, 2008). Again, though, these previous studies are at the individual level.

10.3.5 HIV Issues amongst the Partners

People living with HIV in the study areas suffer from discrimination, isolation and stigmatisation. In some instances, the seronegative partner separates or divorces the one with HIV. Those living with HIV are sometimes afraid to mingle with people in public places; they also avoid drugs collection centres close to their residence for fear of being seen collecting HIV drugs (Johnson, 2012). There are instances where partners hide their HIV status due to fear of discrimination, stigmatisation and isolation; gossip, and loss of dignity (Sekoni, Obidike & Balogun, 2012; Russell et al., 2016). While Owolabi et al. (2012) have documented the discrimination of those living with HIV by health personnel. Due to the unit of analysis adopted in this study, it has been possible to identify 'both HIV positive partners'; positive/ negative; positive/ don't know partners status; negative/ don't know partners status; and both negative partners. This classification is important because it reveals risk implications. Where there are high rates of unsafe sexual practices, HIV will spread faster in areas with high rates of both HIV positive partners (complete open positive webs) than places with low rates of this group of partners given high levels of unsafe sexual practices. Partners HIV status interacts with types of alcohol to significantly influence categorical membership in sexual intimacy especially, at the lowers levels.

10.3.6 Sexual Webs

The contextual sexual issues (patriarchal setting and associated issues) favour heterosexual relationship; however, there are few individuals who engage in bisexual, homosexual, and lesbian relationships. The level of sexual intimacy amongst partners in each of these relationships is either 'no sexual intimacy'; 'very low intimacy'; 'low intimacy'; 'moderate intimacy;' 'high intimacy'; or "very high intimacy'; and the higher the satisfaction with the relationship, the higher the levels of sexual intimacy. The correlates of sexual intimacy cut across a wide range of capacity, motivations; performance, HIV and webs variables. These findings are different from the affective and cognitive explanation of sexual intimacy (Remien, Carballo-Dieguez et.al., 1995). Similarly, Giddens' (1992) thesis on romantic love and pure love, which according to him, the former is rooted in traditions while the latter is enhanced by the quest for self-development, and anchored on development, and globalisation.

Giddens' identification of ontological insecurity and pathological addiction as the consequences of transformation from romantic love to pure love further differentiates his focus and the current study. Nobelius et al. (2011) and Jaurez and Martin (2006) have observed that sexual behaviour varies based on types of relationship, that is, whether it is permanent, casual, or steady relationships. These are individual-based studies, and in addition, they have not provided relationship pathways for understanding unsafe sexual behaviours and infections. In contrast, my study, sexual intimacy varies from casual sex (no intimacy) to very high intimacy (sexual exclusivity), and it is influence by host of factors (sexual capacity, sexual motivations, sexual performance, HIV) that assist in lowering or increasing the chances of HIV infections. Factors that will enhance the level of sexual intimacy will also reduce the likelihood of multiple sexual relationships and HIV risk

10. 4 'Social Preventive Therapy' against Illicit Sex

Both men and women spy on their partner to foreclose attempts to engage in illicit relationships, more particularly, if he or she has been suspected of having another sexual relationship. This is done by checking phone call logs or by calling the partner frequently to know the whereabouts of the partner, especially when she or he has left the house for somewhere. There are those who pay surprise visits to place of work of partners, employ the watchfulness of friends or/and relations, and meeting the basic needs of the partner (it might vary based on the individual). These behaviours are introduced to check against partner's illicit sexual intercourse, and by extension HIV infection. This behaviour has been sighted in the works of scholars examining domestic violence (Tjaden, & Thoennes, 1998). They refer to it as stalking a partner, which according to them constitutes a crime to be punishable by law.

However, self-defence is an act of violence which cannot be condoned under normal circumstances, but acceptable under the law when one's life is endangered. Thus, these acts (stalking) which constitute crimes elsewhere are contextually beneficial in repelling HIV infection through the prevention of illicit sex. Furthermore, scholars of sexual behaviour have not documented this aspect of behaviour amongst sexual partners; and because of its benefits in preventing HIV infection through illicit sex; these acts have been documented as 'social preventive therapy' against illicit sex.

In summary, the present study differs with the previous ones in a number of ways: (1) the theoretical model utilised by the current research is more robust and has overcome the

limitations of the previous ones. The concepts of sexual capacity, sexual motivation, sexual performance and sexual webs are suitable for the study of macro and micro issues surrounding sexual behaviours (2) the previous studies had focused on the individual while the current study has focused on the partners; (3) the previous studies that examined culture and poverty did not specify the relationship pathway between these structural factors, unsafe sexual behaviours and HIV, while the current study has specified the relationship pathways; (4) some of the previous studies that examined psycho-social factors and sexual behaviours did not include relational variables, while the current study has examined relational variables (sexual intimacy, sexual web HIV status); (5) the current study has extended the frontiers of knowledge on the roles of poverty, markets, drinking places, schools, funeral, and hotels on sexual behaviours from the individual level to the level of partners; (6) the current study has observed for the first time, that 'stalking' is used as social preventive therapy against illicit sex and HIV; (7) the current study has observed a sub-culture of beauty amongst women, which act as a bond amongst them to sustain illicit sexual relationships, which are beneficial in obtaining the things that will make them beautiful and attractive; (8) the current study has also observed that people living with HIV are stigmatised and, which has affected their social wellbeing that has resulted to depression, isolation, and in some instances death amongst them though similar with other findings (9) the current study has observed the presence of secret concurrent multiple sexual partnerships, as a form of concurrency amongst the Tiv people, which has not been well documented by previous studies in the study area; (10) Apart from the fixed effects of the independent variables on sexual intimacy, structural variable (types of alcohol are either produced or brought in the communities) interacts with relational variable (partner's HIV status) to significantly influence categorical membership of sexual intimacy. Similarly, partner's HIV status is nested within the family types to influence sexual intimacy; while period of away from primary partner interacts with number of sexual partners; and sex while drunk interacts with types of alcohol to influence categorical membership of sexual intimacy. Relationship status has parallel effects on categorical membership of sexual intimacy.

CHAPTER ELEVEN SUMMARY, CONCLUSION AND RECOMMENDATION

11.1 Summary

11.1.1 Introduction

HIV infection in Nigeria is a generalised epidemic. In 2013, the burden of HIV in the country was estimated to be about 220, 394 new infections, 210,031 HIV related deaths, 1,476,741 requiring drugs, and 3,229,757 individuals living with HIV (NACA, 2014). The Agency also reported that 42% of new infections are from individuals who are considered to be in 'low risk' sexual relationships such as those who are married or cohabiting (NACA, 2012).

The message for behaviour change advocates to reduce HIV infections through sexual intercourse say, individuals should stick to their regular sexual partner, or use condom, if they are to have sex with individuals other than their regular sexual partners. The question is- are individuals able to stick to one sexual partner? If not, do they usually use condoms when they are having sex with individuals other than their regular sexual partner? The above questions led to the examination of 'Contextual factors influencing unsafe sexual behaviours and the spread of HIV amongst the Tiv people of North Central Nigeria'. But to proceed with the study required knowledge of existing literature on unsafe sexual behaviours within and outside Nigeria.

A critical survey of the literature on sexual behaviour revealed that almost all the studies utilised the individual as the unit of analysis rather than the partner, and the findings reflect the epistemology of disciplines involved in the study of sexual behaviour. The dominant perspectives in the study of sexual behaviour are Public health, Psychology, Sociology (culture, symbolic interactionism) and Political economy. For instance, studies focusing on psychosocial predictors of unsafe sexual behaviours avoid relational and other distal variables (Adaji et al., 2011; Alarape et al., 2008; Egbochukwu & Ekanem, 2008; Hutton et al., 2008; Lammers et al., 2011; Sunmola, 2005;). Other studies that examined poverty (Cunningham, & Kendal, 2010 Richter et al., 2010), dysfunctional social institutions (Meera, & Mufene, 2011; Wayomi et al., 2011), symbolic meanings (Williamson et al., 2009; Crowford, 2010), and culture (Rigillo, 2009; Smith, 2004) to explain unsafe sexual behaviours but did not consider relational or other structural variables to provide a holistic explanation. One of reasons for

Another related problem was the dearth of social scientific models that provide constructs with pathways to measure relational and distal predictors of sexual behaviour (see section 2.2.2 and 2.2.3, PP.10-16). However, over the period there has been strong desire to incorporate distal factors into the programme interventions to reduce the spread of HIV, most especially in parts of the world where there are evidence that distal factors are influencing the epidemic (Auerbach, & Coates, 2000; Coates et al., 2008; Kurth et al., 2011).

The present doctoral research has adopted an integrated theoretical perspective – which I refer to as "the sexual webs model" (Timiun, 2011; 2012) to examine sexual behaviour in the field. The focus of the study was to examine the influence of relation, distal, and other individual variables on unsafe sexual behaviours and the spread of HIV at partners' level. This model, I have demonstrated, has overcome the limitations of the previous models, and is very effective for measuring relational, distal factors, individual, and family factors in relation to sexual behaviours and HIV infections.

11.1.2 Research Questions, Objectives and Hypotheses

The research was guided by questions, objectives and hypotheses which were tested. The hypotheses were logically deduced from the research questions and objectives for verification. Below are the questions, objectives and hypothesis:

- (1) What are the forms or types of sexual relationships among partners within the sexual web (sexual relationships) in the study area?
- (2) What are the levels of sexual intimacy among sexual partners in the sexual webs?
- (3) What is the relationship between levels of intimacy and unsafe sexual behaviours in the sexual webs?
- (4) What is the relationship between unsafe sexual behaviours and the spread of HIV/AIDS in the study area?

And the specific objectives were:

- Identify forms or types of sexual relationships (heterosexual, bisexual, lesbian, homosexual) within the sexual webs in the study area.
- (2) Examine the levels of intimacy among sexual partners in the sexual webs.
- (3) Examine the relationship between the levels of intimacy and unsafe sexual behaviour in the sexual webs.
- (4) Examine the relationship between unsafe sexual behaviours and the spread of HIV/AIDS

- (5) Extend the frontiers of knowledge in terms of theoretical modelling and operationalisation of concepts for empirical data collection within the context of unsafe sexual behaviour researches
- (6) Provide 'building blocks' for social policy formulation and program interventions to regulate unsafe sexual behaviours, and stem the spread of HIV/AIDS

While the following hypotheses were verified:

- The levels of intimacy among sexual partners in the sexual webs would depend on their individual, family or community factors.
- (2) The lesser the intimacy among sexual partners the more likely the unsafe sexual behaviour
- (3) The extent of the positive sexual webs in the areas would depend on the extent of the unsafe sexual behaviour in the areas.
- (4) The extent of the spread of HIV/AIDS would depend on the extent of the positive sexual webs in the areas.

A sample of 1,601 respondents were selected using multi-stage sampling methods for quantitative data collection, while another sample of 20 individuals were selected using purposive sampling for in-depth interviews. Univariate, bivariate (see de Vaus, 2014) and the Generalised Linear model with Cumulative Logit Link (McCullagh, 1980) was used in analysing the quantitative data. The study observed that:

(1) Sexual intimacy depends on sexual capacity, sexual motivation, sexual performance, HIV and sexual webs variables.

(2) The lesser the sexual intimacy, the more likely the unsafe sexual behaviours and verse versa.

(3) The extent of sexual webs HIV status will depend on the extent of the levels of sexual intimacy.

(4) The extent of sexual webs HIV status (both positive webs/ spread of HIV) depends on unsafe sexual behaviours. Thus, there are more multiple partnerships and both positive sexual webs in urban-Ichongu than the other locations; hence HIV will spread faster in urban-Ichongu than the other locations holding other factors constant.

(5) The hotels, drinking places, market, funerals, schools, Nollywood films, cultural norms, poverty, procreation, peer or group sub-cultural influence on illicit sex, and unsafe sexual behaviours and HIV infections, at partners' level

(6) Though self-defence is an act of violence which cannot be condoned under normal circumstances, it is acceptable under the law when one's life is endangered. Stalking which is seen as an act of violence elsewhere, is contextually used by partners (both men and women) to prevent illicit sex and HIV infection. Thus, stalking has been documented in this study as social preventive therapy against illicit sex, and HIV infections.

Consequent upon the findings, it can be submitted that, the research questions have been answered, the objectives realised, and the hypotheses, all verified.

11.2 Conclusion

As earlier contended, the current study is different from the previous ones on two grounds: (1) whereas almost all the previous studies have utilised fewer perspectives within disciplinary boundaries, to examine sexual behaviours in spite of their limitations, the current study has utilised a theoretical model which incorporates almost all the perspectives (inter-disciplinary) to examine sexual behaviours; (2) the previous studies have focused more on the individual, despite the fact that sex involves two or more individuals (multiple partners) while the present study has focused on partners; (3) previous studies that examined culture and poverty did not specify the relationship pathway between these structural factors, unsafe sexual behaviours and HIV, while the current study has specified the relationship pathways; (4) some of the previous studies that examined psycho-social factors and sexual behaviours did not include relational variables, while the current study has examined relational variables.

This research has identified types of sexual relationships (heterosexuality, homosexuality, lesbian and bisexual) and sexual webs HIV status (positive/negative, positive/don't know, positive/positive, negative/negative, and negative/don't) in the areas; (2) the levels of sexual intimacy in the study areas are: no intimacy, very low intimacy, low intimacy, moderate intimacy, high intimacy and very high intimacy; (3) sexual intimacy depends on sexual capacity, sexual performance, sexual motivation, and HIV variables; (4) the extent of sexual webs HIV status (partners' HIV status) depends on levels of sexual intimacy, and the spread of HIV in the area depends on the extent of positive sexual webs and unsafe sexual behaviours.

Due to the differences in theoretical conception and unit of analysis, and variables of interest, there are implications of the current study for research and sub-field of reproductive health (sexual behaviours).

11.2.1 Implications for Research (Theoretical and Empirical)

The model of analysis adopted for this study is an explanatory model that incorporates perspectives from Public Health, Cognitive Psychology, Sociology and Political Economy. The concepts are robust and very effective in measuring both covert and overt sexual behaviours. Thus, it has overcome the limitations of the lack of appropriate concepts to measure distal and relational factors in sexual behaviour studies.

The model has provided clear relational pathways between capacities, motivations, performances and outcome variable (HIV infection). Hence it can be used for both investigative and intervention projects. It is only with the utilisation of the concept of 'sexual transitivity partner' that two women married to one man, and without any other sexual partner elsewhere, can be said to be keeping two sexual partners each ('A = B'; 'B = C'; 'C = D'; therefore A=D). This concept has been effectively utilised in this study to measure the number of sexual partners in polygamous relationships. It will soon be available for use by researchers in the area of sexual behaviour studies.

It is possible to conceive sexual intimacy as a variable on a scale of continuum with casual sexual relationship (no intimacy) on one end and sexual exclusivity on other end. These two extreme sexual relationships can be examined simultaneously in a study, as it is the case with this current study.

This study has pioneered the utilisation of sexual webs model, and may stimulate contextual and comparative sexual behaviour research, following the publication of the methods. The advantage of this social scientific model of sexual behaviour over the others is that it can be used by all scholars interested in sexual behaviour.

The frontiers of knowledge have been extended in several dimensions by the availability of information on partners (sexual webs) HIV status and its correlates - the levels of sexual intimacy.

In addition, there is information on levels of sexual intimacy and its correlates (relationship status, family support, favours, period of partner stay away, sex while drunk, number of wives, number sexual partners, partners HIV status, and relationship satisfactions. Furthermore, information is also available on the roles of hotels, drinking places, markets, funerals, schools, Nollywood films, cultural norms, poverty, procreation, peer or group subculture on sexual behaviours and HIV infections at the partners level. Lastly, it is interesting to note that stalking is a double edge sword. Whereas it is documented as crime in study of domestic violence, it is used by partners (both men and women) to prevent illicit sex and HIV infection. Thus, I have documented in this study that stalking is a social preventive therapy against illicit sex, and HIV infections.

11.2.2 Implications for the Sub-field Reproductive Health (Sexual Behaviours)

The utilisation of sexual webs model for sexual behaviour research may contribute to break the ideological boundaries in which each discipline (Psychology, Sociology, Public health, Political economy) had been conducting research on sexual behaviour. All the disciplines interested in sexual behaviour can collaborate with each other in research or intervention programmes to change sexual behaviour using sexual webs model. For example, the findings in this study on culture, poverty, condoms usage, number of sexual partners, favours, HIV, sexual intimacy (sexual capacity, motivations, performance, HIV and sexual webs) and so forth cut across the disciplinary divide. Thus, each discipline interested in sexual behaviour will have a stake, if sexual webs model is used for research or programme intervention for sexual behaviour change.

11.2.3 The Contributions of this Study to Theory and Practice

(1) The sexual webs model utilised for this study has provided concepts for the measurement of distal (structural) and relational (sexual intimacy, partners HIV status) variables in subsequent research projects aiming at understanding sexual behaviour.

(2) The concept of the 'sexual transitivity partner' introduced by this study may help in settling the measurement contention of whether two women married to one man should be considered as having one sexual partner each or two sexual partners.

(3) This study has measured sexual intimacy on a scale with casual sex (no intimacy) on one end and sexual exclusivity (very high intimacy) on the other end to study its effect on the spread of HIV. And between these two extreme ends, are very low intimacy, low intimacy, moderate intimacy and high intimacy. It means the sexual intimacy of each partner in the population can be studied with the scale. This may be an innovative approach to the study of sexual behaviours at partners' level.

(4) This study has classified the sample of study by HIV status (both negative, negative/don't know partner's status; positive/ don't know partner's status; positive/ negative; both positive) for the purpose of examining their levels of sexual intimacy. It is possible to predict partners'

likelihood of either being HIV positive or negative given their level of sexual intimacy. This may also be an innovative approach to the study of sexual behaviours and HIV at partners' level.

(5) The study has provided relationship pathways between distal (poverty, culture etc.) variables and the outcome of HIV infection. It can be replicated in other studies examining factors influencing sexual behaviours.

(6) The role of poverty on sexual behaviours was documented by previous studies in a manner which suggested that being poor necessarily leads to unsafe sexual practices. However, the present study has observed that not all partners with low income have lower levels of sexual intimacy. In those partners, poverty has not transformed into pressing needs that would require an illicit sexual relationship to satisfy.

(7) The study has extended the frontiers of knowledge from the effect of alcohol on sexual behaviour to the effect of drinking places on sexual behaviour in the study area.

(8) The frontiers of knowledge have been extended from the impact of hotels on commercial sex to the roles of hotels in illicit sex involving married or regular partners in the study area (9) The frontiers of knowledge has been extended from the roles of traditional funerals on sexual behaviour amongst young adults to the roles of Christian funerals on illicit sex involving married individual or regular partners.

(10) The frontiers of knowledge have also been extended from the impact of exclusive pornographic films on sexual behaviour to the impact of passive pornography (from Nollywood films) on sexual behaviour.

(11) The frontiers of knowledge has been extended from the roles of open markets in commercial sex to the roles of open markets in illicit sex involving married or regular partners in the study area

(12) The frontiers of knowledge have been extended from the sexual behaviour amongst young adults attending classes in schools to illicit sexual behaviours involving married or regular partners who are in school.

(13) The study has made available information on how married women assist each other to sustain an illicit sexual relationship.

(14) There is also now information on how stalking is used as social prevention therapy against illicit sex and HIV infection in the study area.

(15) Apart from the fixed effects of the independent variables on sexual intimacy, this study has indicated that structural variables (types of alcohol) interacts with relational variable (partner's HIV status) to significantly influence categorical membership of sexual intimacy. Similarly, partner's HIV status is nested within the family types to influence sexual intimacy; periods of being away from primary partner interacts with number of sexual partners; and sex while drunk interacts with types of alcohol to influence categorical membership of sexual intimacy intimacy within the locations. Relationship status has parallel effects on categorical membership of sexual intimacy.

(16) It is hoped that programme interventions to change sexual behaviours in the study area can integrate these findings into their programmes for prevention of new infections through sexual intercourse and reduce the spread of HIV.

Apart from the contributions indicate above, the study has also ascertained that, there is group sub-culture of beauty amongst women which translates into the need for various beauty products and other needs; poverty, peer influence and procreation are strong motivations for sexual relationships. Sexual performance sometimes involves the use of alcohol, and unprotected sexual encounters even occur amongst sero-discordant (one is HIV positive while the other is not) partners. Multiple sexual partnerships are common and it involves male and females, young adults, adults and married persons.

Stigmatisation of those living with HIV is still common despite the awareness of sources of the spread of HIV in the areas. It is the reason why those living with HIV avoid drugs collection centres or travel long distances to collect drugs where presumably, they are not known. It is also the reason for self- isolation, depression and sometimes death amongst those living with HIV.

Finally, I submit that the utilisation of sexual webs model for sexual behaviour research has enabled the examination of variables across ideological boundaries in which various discipline (Psychology, Sociology, Public health, Political economy) had been conducting research on sexual behaviour. My research findings challenge the approach where uniform services are delivered to each individual rather partners as if all are at the same level of sexual intimacy, and I submit that this will not effectively produce the desired results of reducing the rates of HIV infections.

There is also a group of scholars in public health who have proposed transferability and applicability of evidence-based intervention programmes to locations where there is yet strong evidence for informed intervention especially with regard to HIV issues (Wang, Moss & Hiller, 2006). The findings in this study cannot only be used in the study area, but can also be applied to other locations with similar socio-economic and cultural setting in Africa and elsewhere, especially with yet strong evidence for informed HIV intervention programmes.

11.2.4 Limitations of Study

The samples for study (1,621 respondents including sample for in-depth interviews) were drawn from four locations which are unique entities (not representative sample of urban and rural settlements in Nigeria); thus, the examination of the variation of sexual intimacy amongst partners was within and not between the locations. However, this is not a limitation that has effect on the findings, but an acknowledgement of the possibilities of conducting between the locations analysis, if the locations were drawn from, and been representative sample of the population of locations. An understanding of the variations in sexual intimacy between regions will require a national study involving many States in the regions. Such a study should obtain a representative sample of rural or urban areas to examine sexual intimacy amongst partners within the settlements and between the local councils where these settlements are found.

11.3 Recommendations

(1) I recommend the sexual webs model for the conduct of research on sexual behaviours in all the disciplines. Its propositions transcend ideological boundaries in which each discipline (Psychology, Sociology, Public health, Epidemiology, Political economy) had been conducting research on sexual behaviour. The benefits would be in having similarity of conceptual definitions, measurement of variables, and findings. Such feat would provide sound premises for effective implementation of programme interventions to change behaviour for healthy sexual life.

(2) The findings in this research cannot only be used for the study area, but can also be generalised and utilised for programme intervention for the prevention of HIV/AIDS infections in other areas (other parts of Nigeria, Sub-Saharan Africa, Africa, and other developing world) that share similar socio-economic characteristics with the study area.
(3) This study can be replicated to observe sexual behaviours and the spread of HIV in other communities, states, and countries.

(4) Programme interventions to change sexual behaviours should also focus on partners rather than individuals.

(5) Programme interventions to change sexual behaviours for the reduction of HIV infections should address the specific needs of partners at different levels of sexual intimacy. The approach where uniform services are delivered to each individual rather than partners, and as if all are at the same level of intimacy, will not effectively produce the desired results.

(6) There should be serious efforts by the government to address the issue of poverty. If there are no employment opportunities; then the government should consider placing those unemployed on monthly stipends that can make them meet basic needs.

(7)The activities taking place at drinking places should be regulated. Fines should be imposed on people who get drunk and misbehave.

(8) A deterrent fine should also be imposed on liquor sellers who allow 'verbal pornography' in their places and may also violate other safety operation rules.

(9) There should be a law requiring hotels owners to put warning notices at the hotels for their customers that illicit sex with married individuals is a crime (under customary law), and that the hotel can be a witness against any customer who breaks the law and is prosecuted by the husband or wife of the unfaithful partner in any court of law.

(10) There should be public enlightenment discouraging married or regular partners from using schools, markets, funerals and so forth for negotiating illicit sex.

(11) There should be an immediate programme for the provision of food to those who are collecting HIV drugs at all the drug collection centres. Most of those who are collecting drugs are suffering due to the huge health challenges imposed on them by the disease.

(12) There should be aggressive public awareness involving the traditional and opinion leaders against stigmatisation of people living with HIV. The stigma has caused untold hardship amongst the HIV patients. Some of them have died as a result depression and self-isolation because of the treatments they have received from friends and relations.

(13) People should be enlightened on the benefits of adopting children. This will help in reducing the rate of unsafe sexual intercourse amongst sero-discordant partners who are desirous of having children.

11.2.6 Suggested Areas of Further Research

(1) More studies should be conducted on sexual intimacy amongst other groups or locations

(2) Studies examining sexual behaviours should adopt the sexual webs model to measure relational and distal variables. This will enhance easy comparison of results, with all researchers who are working with similar concepts and measurements.

(3) There should further studies on poverty and sexual behaviours. These studies should target low income earners, and should be aimed at understanding why some low income partners have very high sexual intimacy.

(4) There should be more studies focusing on the impact of drinking places and hotels on sexual behaviours

(5) There should be more studies focusing on sexual behaviours amongst people living with HIV.

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APPENDIX A5

Tables Showing Bivariate Relationships between Sex, and Sexual Capacity,Motivations, Performance, HIV, and Sexual Webs Variables

Table A5.1

Distribution of Respondents' Residence by Sex

		Sex		
	Male	Female	Total	%
Residence				
Urban	49.8%	50.7%	805	50.3
Rural	50.2%	49.3%	796	49.
Total	749	852	1601	
%	100	100	100	100

Note: The source of the data is from field survey, 2014

Table A5.2

Distribution of Respondents' Location of Residence by Sex

		Sex		
	Male	Female	Total	%
Location of residen	ice			
Urban-Ipusu	24.4%	26.8%	411	25.7
Urban-Ichongu	25.4%	23.9%	394	24.6
Rural-Ipusu	22.6%	26.6%	396	24.7
Rural-Ichongu	27.6%	22.7%	400	25.0
Total	749	852	1601	
%	100	100	100	

, in the second s	1 0			
	Se	ex		
	Male	Female	Total	%
Age				
18-19yrs	8.7%	11.5%	163	10.2
20-24yrs	14.4%	21.7%	293	18.3
25-29yrs	18.7%	23.7%	342	21.4
30-34yrs	21.4%	20.7%	336	21.0
35-39yrs	8.4%	6.7%	120	7.5
40-44yrs	11.1%	6.2%	136	8.5
45-49yrs	6.4%	5.9%	98	6.1
50-54yrs	6.4%	2.2%	67	4.2
55-59yrs	17%	0.5%	35	2.2
60+	0.9%	0.5%	11	0.7
Total	749	852	1601	
%	100	100	100	

Table A5.3Distribution of Respondents' Age in Years by Sex

Note. The source of data is from field survey, 2014

Table A5.4

Distribution of Respondents and Primary Partners' Educational Attainment by Sex

Sex				
Respondent	Male	Female	Total	%
Levels of education				
No formal schooling	7.1%	8.1%	122	7.6
Primary	9.2%	14.0%	188	11.7
Secondary	44.6%	50.1%	761	47.5
Tertiary	39.1%	27.8%	530	33.1
Total	749	852	1601	
%	100	100	100	
	Partners' Educati	onal Attainment		
No formal schooling	10.7%	6.7%	137	8.6
Primary	15.8%	10.7%	209	13.1
Secondary	52.7%	42.7%	759	47.4
Tertiary	20.8%	39.9%	496	31.0
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' Income (Naira), Religious Affiliation; and whether a Leader in Religious Organisation by Sex

Sex

				- 0/
	Male	Female	Total	%
Income				
Less than 25,000	67.7%	79.7%	1186	74.1
25,000-49,000	21.1%	15.1%	287	17.9
50,000-99,000	8.3%	4.2%	98	6.1
100,000 +	2.9%	0.9%	30	1.9
Total	749	852	1601	
%	100	100	100	
	Respondents' Rel	igious Affiliation		
Christianity	92.1%	96.2%	1503	93.9
Islam	1.9%	1.2%	24	1.5
Traditional religion	6.7%	2.3%	70	4.4
Others	0.3%	0.2%	4	0.2
Total	749	852	1601	
%	100	100	100	
	Leader in Religio	us Organisation		
Strongly Disagree	10.5%	11.9%	180	11.2
Disagree	43.0%	45.4%	709	44.3
Agree	37.0%	34.0%	567	35.4
Strongly agree	4.4%	4.6%	145	9.1
Total	749	852	100	
%	100	100	100	

S	ex		
Male	Female	Total	%
24.3%	31.6%	451	28.2
16.7%	9.2%	203	12.7
19.9%	25.1%	363	22.7
20.4%	25.0%	366	22.9
13.6%	8.6%	175	10.9
5.1%	0.6%	43	2.7
749	852	1601	
100	100	100	
Primary Partners	Occupation		
33.6%	25.4%	468	29.2
7.5%	23.1%	253	15.8
26.0%	23.2%	393	24.5
21.8%	14.9%	290	18.1
10.4%	10.6%	168	10.5
0.7%	2.8%	29	1.8
749	852	1601	
100	100	100	
	Male 24.3% 16.7% 19.9% 20.4% 13.6% 5.1% 749 100 Primary Partners 33.6% 7.5% 26.0% 21.8% 10.4% 0.7% 749 100	Male Female 24.3% 31.6% 16.7% 9.2% 19.9% 25.1% 20.4% 25.0% 13.6% 8.6% 5.1% 0.6% 749 852 100 100 Primary Partners Occupation 33.6% 25.4% 7.5% 23.1% 26.0% 23.2% 21.8% 14.9% 10.4% 10.6% 0.7% 2.8% 749 852 100 100	Male Female Total 24.3% 31.6% 451 16.7% 9.2% 203 19.9% 25.1% 363 20.4% 25.0% 366 13.6% 8.6% 175 5.1% 0.6% 43 749 852 1601 100 100 100 Primary Partners Occupation 33.6% 25.4% 33.6% 25.4% 468 7.5% 23.1% 253 26.0% 23.2% 393 21.8% 14.9% 290 10.4% 10.6% 168 0.7% 2.8% 29 749 852 1601

Distribution of Respondents' Occupation, and Primary Partners' main Occupation by Sex

Note. The source of data is from field survey, 2014

Table A5.7

Distribution of Respondents' Regular Attendance of Religious Activities by Sex

	Sex			
	Male	Female	Total	%
Regular attendance				
Strongly disagree	6.4%	6.6%	104	6.5
Disagree	27.5%	24.5%	415	25.9
Agree	52.7%	54.2%	857	53.5
Strongly agree	13.4%	14.7%	225	14.1
Total	749	852	1601	
%	100	100	100	

		Sex		
	Male	Female	Total	%
Religious organi	sation			
Catholic	52.2%	57.3%	879	54.9
Protestant	28.3%	29.0%	459	28.7
Pentecostal	10.7%	10.0%	165	10.3
Islam	1.9%	1.2%	24	1.5
Traditional	6.7%	2.3%	70	4.4
Others	0.3%	0.2%	4	0.2
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' Religious Organisations by Sex

Note. The source of data is from field survey, 2014

Table A5.9

Distribution of Respondents' Types of Family they come from, and Support Received by Sex

Sex				
	Male	Female	Total	%
Family Types				
Monogamous	47.5%	47.4%	760	47.5
Polygamous	47.1%	47.4%	404	47.3
Single	5.1%	5.2%	82	5.1
Others	0.3%	0.0%	2	0.1
Total	749	852	1601	
%	100	100	100	
	Types of	of Family Support		
Money	40.1%	50.6%	731	45.7
Material	13.5%	16.0%	237	14.8
Both	5.9%	3.9%	77	4.8
No support	40.6%	29.6%	556	34.7
Total	749	852	1601	
%	100	100	100	

		Sex		
	Male	Female	Total	%
		Need Money		
Strongly disagree	23.6%	13.4%	291	18.2
Disagree	47.8%	36.7%	671	41.9
Agree	22.0%	40.7%	512	32.0
Strongly agree	6.5%	9.2%	217	7.9
Total	749	852	1601	
%	100	100	100	
	Desir	e to have children		
Strongly disagree	4.4%	7.9%	100	6.2
Disagree	21.0%	20.9%	335	20.9
Agree	44.3%	45.8%	722	45.1
Strongly agree	30.3%	25.5%	444	27.7
Total	749	852	1601	
%	100	100	100	
	De	sire for pleasure		
Strongly disagree	8.1%	8.8%	136	8.5
Disagree	28.0%	26.8%	438	27.4
Agree	38.6%	44.2%	666	41.6
Strongly agree	25.2%	20.2%	361	22.5
Total	749	852	1601	
%	100	100	100	
		Place to live		
Strongly disagree	22.7%	18.9%	331	20.7
Disagree	48.9%	41.4%	719	44.9
Agree	23.1%	31.6%	442	27.6
Strongly agree	5.3%	8.1%	109	6.8
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' Motivations for Sexual Relationships (Need Money, and would love to have Children, Desire for Pleasure and Place to live) by Sex

Distribution	of Respondents'	Motivations for	Sexual	Relationships (Favours	and Love,) by
Sex							

	Sex			
	Male	Female	Total	%
Favours				
Strongly disagree	18.8%	18.8%	301	18.8
Disagree	35.0%	27.8%	499	31.2
Agree	36.3%	43.1%	639	39.9
Strongly agree	9.9%	10.3%	162	10.1
Total	749	852	1601	
%	100	100	100	
		Love		
Strongly disagree	3.7%	3.4%	57	3.6
Disagree	7.9%	6.9%	118	7.4
Agree	59.5%	62.9%	982	61.3
Strongly agree	28.8%	26.8%	444	27.7
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5. 12

Distribution of Respondents' Combined Motivations- Love, Need Money and would love to have Children for Sexual Relationships by Sex

	Sex			
	Male	Female	Total	%
Love, money & chil	dren			
Love or money or children	27.9%	20.7%	385	24.0
Children & Money	3.2%	5.8%	73	4.6
Love & money	3.7%	8.7%	102	6.4
Love & child	44.9%	32.3%	611	38.2
Love & money & child	20.3%	32.6%	430	430
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' Combined Motivations-Pleasure, Place to live and Favours for Sexual Relationships by Sex

	Sex			
	Male	Female	Total	%
Favours, place &ple	asure			
pleasure or place or favours	58.2%	47.7%	842	52.6
Place and favours	5.7%	7.7%	109	6.8
Pleasure and place	4.1%	7.3%	93	5.8
Pleasure and favours	14.8%	15.6%	244	15.2
Pleasure and place and favours	17.1%	21.7%	313	19.6
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5. 14

Distribution of Respondents by Receipt of Partner's Assistance, by Sex

	Sex			
	Male	Female	Total	%
Partners' assistan	ce			
Yes	51.1%	87.2%	1126	70.3
No	48.9%	12,8%	475	29.7
Total	749	852	1601	
%	100	100	100	

Table A5. 15Distribution of Respondents' Number of Children with other Partners by Sex

		Sex		
	Male	Female	Total	%
Number of children				
No child	69.7%	71.3%	925	70.5
One	10.2%	12.5%	149	11.4
Two	9.1%	9.8%	124	9.5
Three or more	11.1%	6.4%	114	8.7
Total	640	672	1312	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5.16

Distribution of Respondents' Duration without Primary Partner by Sex

		Sex		
	Male	Female	Total	%
Period without partr	ier			
Less than three months	59.0%	50.4%	871	54.4
Three months to	24.2%	27.8%	418	26.1
less than six Six months to less than nine	5.2%	8.0%	107	6.7
Nine months to	5.6%	7.3%	104	6.5
less than a year One year or more	6.0%	6.6%	101	6.3
Total	749	852	1601	
%	100	100	100	

Sex				
	Male	Female	Total	%
Relationship status	S			
Married	55.7%	47.3%	820	51.2
Single	35.2%	30.9%	527	32.9
Widowed	3.2%	11.6%	123	7.7
Divorced	2.1%	5.0%	59	3.7
Separated	3.3%	4.7%	65	4.1
Cohabiting	0.4%	0.5%	7	0.4
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' R	Relationship Status by Sex
--------------------------------	----------------------------

Note. The source of data is from field survey, 2014

Table A5. 18

Distribution of Respondents' Types of Sexual Relationship by Sex

		Sex		
	Male	Female	Total	%
Types of relationsl	hip			
Heterosexual	97.1%	98.5%	1566	97.8
Bisexual	2.4%	1.3%	29	1.8
Lesbian	0.0%	0.2%	2	0.1
Homosexual	0.5%	0.0%	4	0.2
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5. 19

Distribution of Respondents' Number of Sexual Partners by Sex

		Sex		
	Male	Female	Total	%
Number of Partner	S			
One	15.0%	20.8%	289	18.1
Two	54.3%	58.2%	903	56.4
More than two	30.7%	21.0%	409	25.5
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents by wh	hether they had Ever	Used Condoms by Sex
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		Sex		
	Male	Female	Total	%
Ever used condoms	5			
Yes	84.1%	76.8%	1284	80.2
No	15.9%	23.2%	317	19.8
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5.21

Distribution of Respondents' Brand of Condoms Utilised by Sex

		Sex		
	Male	Female	Total	%
Types of brand				
Gold circle	80.2%	79.7%	1026	79.9
Rough rider	10.5%	8.7%	123	9.6
Lifestyle	3.3%	3.5%	44	3.4
Fantasy	2.7%	3.5%	40	3.1
Others	3.3%	4.6%	51	4.0
Total	630	654	1284	
%	100	100	100	

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for only condoms users.

-				
		Sex		
	Male	Female	Total	%
Reasons for brand	đ			
Availability	50.6%	49.6%	529	50.1
Cheap	5.6%	5.9%	61	5.8
Pleasure	10.7%	10.1%	110	10.4
Quality	32.0%	29.8%	326	30.9
Others	1.1%	4.6%	30	2.8
Total	532	524	1056	
%	100	100	100	

Table A5.22Distribution of Respondents' Reasons for Choice of Condoms Brand by Sex

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for only condoms users.

Table A5. 23

Distribution of Respondents' Condoms Failure during Usage (Breakage and Slip off) by Sex

	Sex			
	Male	Female	Total	%
Condoms breakage				
Yes	47.4%	41.4%	708	44.2
No	36.7%	35.3%	576	36.0
Never used	15.9%	23.2%	317	19.8
Total	749	852	1601	
%	100	100	100	
	Condom	slip off		
Yes	28.3%	21.9%	399	24.9
No	55.8%	54.8%	885	55.3
	15.9%	23.4%	317	19.8
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' C	Condoms Usage in the	last Six Months by Sex
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		Sex		
	Male	Female	Total	%
Condoms usage				
Did not use	4.8%	4.9%	78	4.9
Used sometimes	59.7%	55.5%	920	57.5
Used always	19.6%	16.3%	286	17.9
Never used	15.9%	23.2%	317	19.8
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5. 25

Distribution of Respondents' Reasons for not using Condoms by Sex

	Sex			
	Male	Female	Total	%
Reasons for not usin	g			
Don't know where to get one	3.7%	4.6%	67	4.2
It is expensive	1.7%	1.8%	28	1.7
It reduces pleasure	21.8%	26.9	392	24.5
Generally scarce	4.3%	2.7%	55	3.4
Need child	35.9%	35.3%	570	35.6
Never used or not needed	10.5%	6.5%	134	8.4
Others	22.0%	22.3%	355	22.2
Total	749	852	1601	
%	100	100	100	

	Cons	umption of Alcoho	ol		
	Yes	No	Total	%	
Sex					
Male	60.0%	38.4%	749	46.8	
Female	40.0%	61.6%	852	53.2	
Total	620	981	1601		
%	100	100	100		

Distribution of Respondents' Alcohol Consumption by Sex

Note: Source of data is from Field survey, 2014

Table A5.27

Distribution of Respondents' Sexual Intercourse while Drunk by Sex

		Sex			
	Male	Female	Total	%	
Sex while drunk					
Yes	31.2%	17.8%	386	24.1	
No	18.3%	11.4%	234	14.6	
Never drank	505%	70.8%	981	61.3	
Total	749	852	1601		
%	100	100	100		

Note. The source of data is from field survey, 2014

Table A5.28

Distribution of Respondents' Alcohol Types consumed by Sex

Sex				
	Male	Female	Total	%
Types of alcohol				
Ogogoro	6.5%	2.6%	71	4.4%
Burukutuu	7.7%	3.5%	88	5.5%
Beer	22.2%	14.8%	292	18.2%
Palm wine	6.5%	7.0%	109	6.8%
Others	6.5%	1.3%	60	3.7%
Never drank	50.5%	70.8%	981	61.3%
Total	749	852	1601	
%	100	100	100	

Table A5. 29Distribution of Respondents' Number of Times they drink in a Week by Sex

	Sex			
	Male	Female	Total	%
Number of times dri	ink			
1 time	21.0%	35.7%	167	26.9
2 times	31.5%	30.5%	193	31.1
3 times	23.2%	22.5%	142	22.9
More than 3 times	24.3%	11.2%	118	19.0
Total	371	249	620	
%	100	100	100	

Note. The source of data is from field survey, 2014. Total less than 1601 because the question is only for those that consume alcohol.

Table A5.30

Distribution of	of Res	pondents'	Drug	Usage	and l	had	taken	Drug	for	Sex,	bv	Sex
		1		0				0.0	/		~	

	Sex			
	Male	Female	Total	%
Drug usage				
Yes	5.7%	3.2%	70	4.4
No	94.3%	96.8%	1531	95.6
Total	749	852	1601	
%	100	100	100	
	Taken Drugs for S	Sex		
Yes	76.7%	74.1%	53	75.7
No	23.3%	25.9%	17	24.3
Total	43	27	70	
%	100	100	100	

Note. The source of data is from field survey, 2014. Total less than 1601 in case of taken drugs for sex because the question is only for those that consume drug

		Sex		
	Male	Female	Total	%
Types of Drug				
Solution	14.0%	3.7%	7	10.0
Cannabis	20.9%	14.8%	13	18.6
Traditional	62.8%	81.5%	49	70.0
Others	2.3%	0.0%	1	1.4
Total	43	27	70	
%	100	100	100	

Table A5. 31Distribution of Respondents' Type of Drugs Consumed by Sex

Note. The source of data is from field survey, 2014. Total less than 1601 because the question is for drug users only.

Table A5.32

Distribution	of	^c Respondents ²	' K	Knowledge	of	Sources	01	f Spread	0	f HIV	by	Sex
	~	1		0	~		~	1	~ ~		~	

	Sex			
	Male	Female	Total	%
Source of spread				
Unprotected casual sex	76.1%	70.8	1173	73.3
Blood transfusion	7.2%	10.0%	139	8.7
Sharing syringes or needles	4.5%	5.4%	80	5.0
Others	2.4%	2.2%	37	10.7
Don't know	9.7%	11.6%	172	2.3
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table A5.33

Distribution of Test for HIV in last Six Months preceding Interviews by Sex

		Sex		
	Male	Female	Total	%
Tested for HIV				
Yes	43.0%	56.9%	807	50.4
No	57.0%	43.1%	794	49.6
Total	749	852	1601	
%	100	100	100	

		Sex		
	Male	Female	Total	%
Satisfaction with relationship				
Not satisfied	6.1%	5.4%	92	5.7
Somewhat satisfied	15.0%	18.8%	272	17.0
Satisfied	60.5%	56.6%	935	58.4
Highly satisfied	18.4%	19.2%	302	18.9
Total	749	852	1601	
%	100	100	100	

Distribution of Respondents' Satisfaction with the Primary Relationship

Note. The source of data is from field survey, 2014

Table A5.35

Distribution of Respondents' Levels of Sexual Intimacy by Sex

		Sex		
	Male	Female	Total	%
Levels of intimacy				
No Intimacy	13.5%	19.5%	267	16.7
Very low intimacy	14.2%	16.2%	244	15.2
Low intimacy	7.3%	6.9%	114	7.1
Moderate intimacy	57.3%	46.7%	827	51.7
High intimacy	2.8%	2.6%	43	2.7
Very High intimacy	4.9%	8.1%	106	6.6
Total	749	852	1601	
%	100	100	100	

APPENDIX A6

Tables Showing Bivariate Relationships between Sexual Webs HIV Status, and SexualCapacity, Motivations, Performance, HIV, and Sexual Webs Variables

Table A6.1

Sexual Webs HIV Status by the Sex of Respondents

Sex of Respondents								
	Male	Female	Total	%				
Webs HIV Status								
Negative/don't know	17.5%	15.8%	266	16.6				
Both negative	32.3%	33.2	525	15.2				
Positive/don't know	4.8%	10.8%	128	7.1				
Positive/Negative	10.3%	10.4%	166	51.7				
Both positive	35.1%	29.7%	516	32.2				
Total	749	852	1601					
%	100	100	100					

Note. The source of data is from field survey, 2014 Table A6.2

Age of Respondents (interval in years)									
	18-19yrs	20-24yrs	25-29yrs	30-34yrs	35-39yrs	40-44yrs			
Webs HIV Status									
Negative/don't know	33.7%	22.9%	15.2%	11.3%	25.0%	12.5%			
Both negative	35.0%	38.2%	33.3%	32.7%	25.0%	32.4%			
Positive/don't know	4.9%	8.2%	10.8%	7.1%	7.5%	5.9%			
Positive/Negative	7.4%	10.9%	10.5%	10.7%	9.2%	11.8%			
Both positive	19.0%	19.8%	19.8%	38.1%	45.0%	37.5%			
Total	163	293	342	336	120	136			
%	100	100	100	100	100	100			
		Age of the Res	pondents Contir	nued					
	45-49yrs	50-54yrs	55-59yrs	60+	Total	%			
Negative/don't know	13.3%	7.5%	8.6%	0.0%	266	16.7			
Both negative	33.7%	20.9%	25.7%	18.2%	525	32.8			
Positive/don't know	7.1%	11.9%	5.7%	9.1%	128	8.0			
Positive/Negative	7.1%	17.9%	5.7%	18.2%	166	10.4			
Both positive	38.8%	41.8%	54.3%	54.5%	516	32.2			
Total	98	67	35	11	1601				
%	100	100	100	100	100				

Sexual Webs HIV Status by Age of Respondents

Relationship Status									
	Married	Single	widowed	Divorced	Separated	Cohabiting	Total	%	
Webs HIV status									
Negative/don't know	11.5%	25.2%	19.5%	10.2%	12.3%	14.3%	266	16.6	
Both negative	33.9%	34.5%	26.0%	30.5%	21.5%	14.3%	525	32.8	
Positive/don't known	4.3%	8.9%	19.5%	13.6%	18.5%	8.6%	128	8.0	
Positive/negative	10.0%	11.8%	6.5%	11.9%	9.2%	14.3%	166	10.4	
Both Positive	40.4%	19.5%	28.5%	33.9%	38.5%	8.6%	516	32.2	
Total	820	527	123	59	65	7	1601		
%	100	100	100	100	100	100	100		

Sexual Webs HIV Status by Respondents' Relationship Status

Note. The source of data is from field survey, 2014

Table A6:4

Sexual Webs HIV Status by Respondents' Educational Attainment

Primary Partner's Educational Attainment									
	No schooling	Primary	Secondary	Tertiary	Total	%			
Webs HIV Status									
Negative/Don't know	27.0%	21.3%	18.5%	9.8%	266	16.6			
Both Negative	23.0%	26.6%	30.7%	40.2%	525	32.8			
Positive/Don't know	10.7%	9.0%	7.8%	7.7%	128	8.0			
Positive/Negative	9.0%	8.0%	9.9%	30.0%	166	10.4			
Both Positive	30.3%	36.2%	33.3%	28.0%	516	32.2			
Total	137	209	759	496	1601				
%	100	100	100	100	100				

Table A6:5

	Respondents' Occupation									
	Farming	Civil servant	Business	Students	Unemployment	Others	Total	%		
Webs HIV Status										
Negative/don't know	21.7%	6.9%	10.2%	27.0%	9.1%	4.7%	266	16.6		
Both negative	29.7%	30.0%	23.4%	41.5%	44.6%	34.9%	525	32.8		
Positive/don't know	6.2%	7.9%	13.5%	6.8%	5.7%	0.0%	128	8.0		
Positive/Negative	8.9%	11.3%	11.8%	10.1%	9.7%	14.0%	166	10.4		
Both positive	33.5%	43.8%	41.0%	14.5%	30.9%	46.5%	516	32.3		
Total	451	203	363	366	175	43	1601			
%	100	100	100	100	100	100	100			

Sexual Webs HIV Status by Occupation of the Respondents

Note. The source of data is from field survey, 2014

Table A6.6

Sexual Web HIV Status by whether Respondents are Leaders in Religious Organisation; and by Attendance of Religious Activities

Whether Respondent is a Leader in Religious Organisation								
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%		
Webs HIV Status								
Negative/don't know	16.7%	20.3%	13.2%	11.7%	266	16.6		
Both negative	31.1%	36.4%	28.4%	34.5%	525	32.8		
Positive/don't know	3.9%	8.0%	8.1%	12.4%	128	8.0		
Positive/Negative	9.4%	8.7%	11.3%	15.9%	166	10.4		
Both positive	38.9%	26.5%	39.0%	25.5%	516	32.2		
Total	180	709	567	145	1601			
%	100	100	100	100	100			
		Attendance of	Religious Act	tivities				
	Strongly disagree	Disagree	Agree	Strongly disagree	Total	%		
Negative/don't know	11.5%	20.5%	16.0%	14.2%	266	16.6		
Both negative	18.3%	34.5%	33.6%	33.3%	525	32.8		
Positive/don't know	6.7%	7.5%	7.8%	10.2%	128	8.0		
Positive/Negative	13.5%	9.4%	8.6%	17.3%	166	10.4		
Both positive	50.0%	28.2%	34.0%	24.9%	516	32.2		
Total	104	415	857	225	1601			
%	100	100	100	100	100			

Table A6:7

Income of Respondents in Naira								
	<25,000	25,000- 49,000	50,000- 99,000	100,000+	Total	%		
Webs HIV Status								
Negative/don't know	19.0%	11.5%	4.1%	13.3%	266	16.6		
Both negative	32.2%	33.4%	40.8%	0.0%	525	32.8		
Positive/don't know	7.5%	7.0%	12.2%	23.3%	128	8.0		
Positive/Negative	9.4%	13.6%	11.2%	16.7%	166	10.4		
Both positive	31.4%	31.4%	31.6%	46.7%	516	32.2		
Total	1186	287	98	30	1601			
%	100	100	100	100	100			
		Religion of th	e Respondents	5				
	Christianity	Islam	Traditional	Others	Total	%		
Negative/don't know	16.4%	20.8%	18.6%	50.0%	266	16.6		
Both negative	33.3%	37.5%	21.4%	0.0%	525	32.8		
Positive/don't know	7.7%	8.3%	11.4%	50.0%	128	8.0		
Positive/Negative	10.4%	8.3%	10.0%	0.0%	166	10.4		
Both positive	32.1%	25.0%	38.6%	0.0%	516	32.2		
Total	1503	24	70	4	1601			
%	100	100	100	100	100			

Sexual Webs HIV Status by Income of the Respondents in Naira; and by Religious Affiliation

Note. The source of data is from field survey, 2014

Table A6.8

Sexual Webs HIV Status by Religious Organisation of the Respondents

Respondents' Religious Organisation								
	Catholic	Protestant	Pentecostal	Islam	Traditional	Others	Total	%
Webs HIV Status								
Negative/don't know	18.9%	13.9%	9.7%	20.8%	18.6%	50.0%	266	16.6
Both negative	35.6%	31.2%	27.3%	37.5%	24.1%	0.0%	525	32.8
Positive/don't know	7.3%	7.6%	10.3%	8.3%	11.4%	50.0%	128	8.0
Positive/Negative	9.8%	11.1%	12.1%	8.3%	10.0%	0.0%	166	10.4
Both positive	28.4%	36.2%	40.6%	25.0%	38.6%	0.0%	516	32.2
Total	879	459	165	70	4	1601		
%	100	100	100	100	100	100		

Sexual Webs HIV Stat	us by Types of	Family the	Respondents	Come Fro	om; and by	Types of
Support Received from	n Family Meml	bers				

	Types of Family the Respondents come from							
	Monogamous	Polygamous	Single	Others	Total	%		
Webs HIV Status								
Negative/don't know	14.1%	18.6%	20.7%	50.0%	266	16.6		
Both negative	38.0%	30.0%	9.8%	50.0%	525	32.8		
Positive/don't know	4.6%	11.1%	11.0%	0.0%	128	8.0		
Positive/Negative	10.0%	10.4%	13.4%	0.0%	166	10.4		
Both positive	33.3%	29.9%	45.1%	0.0%	516	32.2		
Total	760	757	82	2	1601			
%	100	100	100	100	100			
		Support recei	ved from Fam	ily Members				
	Money	Material	No support	Money& material	Total	%		
Negative/don't know	16.8%	24.1%	27.3%	11.7%	266	16.6		
Both negative	38.4%	30.0%	23.4%	27.9%	525	32.8		
Positive/don't know	6.7%	6.3%	7.8%	10.4%	128	8.0		
Positive/Negative	9.8%	8.9%	3.9%	12.6%	166	10.4		
Both positive	28.2%	30.8%	37.7%	37.4%	516	32.2		
Total	731	237	77	556	1601			
%	100	100	100	100	100			

Nollywood Film Influence on Illicit Sex						
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%
Webs HIV Status						
Negative/don't know	16.0%	23.8%	15.9%	14.2%	266	16.6
Both negative	24.7%	43.7%	30.2%	32.6%	525	32.8
Positive/don't know	12.3%	4.0%	8.7%	8.2%	128	8.0
Positive/Negative	13.6%	9.5%	10.1%	10.7%	166	10.4
Both positive	33.3%	19.0%	35.1%	34.3%	516	32.2
Total	81	252	781	487	1601	
%	100	100	100	100	100	
		Drinking Joir	nt Influence on	Illicit Sex		
Negative/don't know	18.5%	15.2%	18.0%	14.9%	266	16.6
Both negative	29.6%	28.7%	33.5%	33.3%	525	32.8
Positive/don't know	3.7%	3.7%	8.9%	8.3%	128	8.0
Positive/Negative	11.1%	15.2%	9.1%	10.7%	166	10.4
Both positive	37.0%	37.2%	30.5%	32.8%	516	32.2
Total	54	164	806	577	1601	
%	100	100	100	100	100	

Sexual Webs HIV Status by Influence of Nollywood; and by Drinking Joints on Illicit Sex

Sexual	Webs E	HV Sta	tus by l	Hotels	Influence	on Il	licit Sex,	and by	Laws C	Guiding	Sexual
Relatio	onships										

	Hotel Influence on Illicit Sex						
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%	
Webs HIV Status							
Negative/don't know	18.3%	32.1%	13.2%	17.4%	266	16.6	
Both negative	26.7%	40.4%	30.7%	34.5%	525	32.8	
Positive/don't know	5.0%	2.6%	8.8%	8.6%	128	8.0	
Positive/Negative	11.7%	9.6%	11.1%	9.3%	166	10.4	
Both positive	38.3%	15.4%	36.2%	30.2%	516	32.2	
Total	60	156	849	536	1601		
%	100	100	100	100	100		
		Types of Lav	vs Guiding Re	lationship			
	Religious laws	Customary	Court	Others	Total	%	
Negative/don't know	13.7%	20.6%	7.4%	17.7%	266	16.6	
Both negative	36.7%	26.1%	37.0%	35.8%	525	32.8	
Positive/don't know	7.4%	7.0%	14.8%	11.5%	128	8.0	
Positive/Negative	9.2%	11.6%	14.8%	10.6%	166	10.4	
Both positive	32.9%	34.7%	25.9%	24.3%	516	32.2	
Total	780	568	27	226	1601		
%	100	100	100	100	100		

Table A6.12a

Motivations for Sexual Relationship (Love)								
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%		
Webs HIV Status								
Negative/Don't know	14.0%	25.4%	14.3%	19.8%	266	16.6		
Both Negative	40.4%	29.7%	30.1%	38.5%	525	32.8		
Positive/Don't know	8.8%	7.6%	8.8%	6.3%	128	8.0		
Positive/Negative	7.0%	7.6%	10.3%	11.7%	166	10.4		
Both Positive	29.8%	29.7%	36.6%	23.6%	516	32.2		
Total	57	118	982	444	1601			
%	100	100	100	100	100			
	1	Need Money						
Negative/Don't know	13.1%	17.1%	17.6%	18.1%	266	16.6		
Both Negative	27.8%	36.7%	29.5%	37.0%	525	32.8		
Positive/Don't know	8.9%	7.0%	9.2%	6.3%	128	8.0		
Positive/Negative	15.1%	11.5%	7.6%	4.7%	166	10.4		
Both Positive	35.1%	27.7%	36.1%	33.9%	516	32.2		
Total	291	671	512	127	1601			
%	100	100	100	100	100			

Sexual Webs HIV Status by motivations for Sexual Relationship (love and Need money)

Note. The source of data is from field survey, 2014

Table A6.12b

Sexual Webs HIV Status by motivations for Sexual Relationship (Desire for children and

Pleasure

Motivations for Sexual Relationship (Love)								
	Strongly disagree	Disagree	Agree	Strongly agree	Total %	_		
	Des	sire Children						
Negative/Don't know	15.0%	20.9%	11.9%	21.4%	266 16.6			
Both Negative	37.0%	29.9%	27.1%	43.2%	525 32.8			
Positive/Don't know	15.0%	11.0%	8.0%	4.1%	128 8.0			
Positive/Negative	7.0%	10.7%	11.6%	8.8%	166 10.4			
Both Positive	26.0%	27.5%	41.3%	22.5%	516 32.2			
Total	100	335	722	444	1601			
%	100	100	100	100	100			
	Des	ire pleasure						
Negative/Don't know	12.5%	16.2%	16.2%	19.4%	266 16.6			
Both Negative	25.0%	27.6%	29.7%	47.6%	525 32.8			
Positive/Don't know	8.1%	8.0%	9.3%	5.5%	128 8.0			
Positive/Negative	14.0%	12.6%	10.5%	6.1%	166 10.4			
Both Positive	40.0%	35.6%	34.2%	21.3%	516 32.2			
Total	136	438	666	361	1601			
%	100	100	100	100	100			

	Motivations for Sexual relationship (Place to Live)						
	Strongly disagree	Disagree	Agree	Strongly	Total %		
				agree			
Webs HIV Status							
Negative/Don't know	13.3%	19.7%	14.9%	12.8%	266 16.6		
Both Negative	36.0%	39.9%	19.9%	28.4%	525 32.8		
Positive/Don't know	7.3%	6.8%	10.2%	9.2%	128 8.0		
Positive/Negative	12.4%	8.3%	11.1%	14.7%	166 10.4		
Both Positive	31.1%	25.2%	43.9%	34.9%	516 32.2		
Total	331	719	442	109	1601		
%	100	100	100	100	100		
	Ne	ed Favours					
Negative/Don't know	12.3%	15.8%	17.7%	22.8%	266 16.6		
Both Negative	30.2%	33.5%	29.3%	43.8%	525 32.8		
Positive/Don't know	8.0%	8.2%	7.8%	8.0%	128 8.0		
Positive/Negative	15.9%	10.2%	9.5%	3.7%	166 10.4		
Both Positive	33.6%	30.5%	35.7%	21.6%	516 32.2		
Total	301	449	639	162	1601		
%	100	100	100	100	100		

Sexual Webs HIV Status by motivations for Sexual Relationship (Place to Live, and favours)

Note. The source of data is from field survey, 2014

Table A6.14

Sexual Partners HIV Status by Combined Motivations of Love, Money and Children

Combined Motivations of Love, Money and Child									
	Either	Children	Love and	Love and	Love and	Total	%		
	love or	and	money	children	money and				
	money or	money			children				
	children								
Webs HIV Status									
Negative/Don't know	21.3%	13.7%	25.5%	12.9%	16.0%	266	16.6		
Both Negative	32.2%	26.0%	34.3%	34.5%	31.6%	525	32.8		
Positive/Don't know	10.1%	13.7%	7.8%	6.5%	7.2%	128	8.0		
Positive/Negative	10.1%	12.3%	7.8%	13.7%	6.0%	166	10.4		
Both Positive	26.2%	34.2%	24.5%	32.2%	39.1%	516	32.2		
Total	385	73	102	611	430	1601			
%	100	100	100	100	100	100			
	Combined Motivations of Pleasure, Place and Favour								
---------------------	--	------------------	-----------------------	------------------------	-----------------------------------	-------	------	--	--
	Either pleasure or place or favour	Place and favour	Pleasure and place	Pleasure and favour	Pleasure, place, and favour	Total	%		
Webs HIV Status									
Negative/Don't know	17.1%	12.8%	15.1%	19.3%	15.0%	266	16.6		
Both Negative	35.0%	22.9%	21.5%	48.0%	21.7%	525	32.8		
Positive/Don't know	7.7%	3.7%	10.8%	4.9%	11.8%	128	8.0		
Positive/Negative	10.5%	11.9%	17.2%	8.2%	9.3%	166	10.4		
Both Positive	29.7%	48.6%	35.5%	19.7%	42.2%	516	32.2		
Total	842	109	93	244	313	1601			
%	100	100	100	100	100	100			

Sexual Webs HIV Status by Combined Motivations of Pleasure, Place and Favo	urs;
--	------

Note. The source of data is from field survey, 2014

Table A6.16

Sexual Webs HIV Status by Number of Children with other Partners

	Number of Children with other Sexual Partners								
	No child	One	Two	More than 2	Total	%			
Webs HIV Status									
Negative/don't know	14.8%	15.4%	16.1%	15.8%	198	15.1			
Both negative	33.5%	24.2%	17.7%	21.1%	392	29.9			
Positive/don't know	7.5%	12.1%	13.7%	9.6%	115	8.8			
Positive/Negative	11.5%	9.4%	15.3%	9.6%	150	11.4			
Both positive	32.8%	38.9%	37.1%	43.9%	457	34.8			
Total	925	149	124	114	1312				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014. In the case of children with other sexual partners, the total is less than 1601 because the question is for those who have had more than one sexual partner.

Table A6.17

Sexual Webs HIV Status by Types of Sexual Relationship

	Types of Sexual Relationships								
	Heterosexual	Bisexual	Lesbian	Homosexual	Total %				
Webs HIV Status									
Negative/Don't know	16.5%	13.8%	50.0%	75.0%	266 16.6				
Both Negative	33.0%	24.1%	0.0%	25.0%	525 32.8				
Positive/Don't know	8.0%	6.9%	50.0%	0.0%	128 8.0				
Negative/Positive	10.3%	17.2%	0.0%	0.0%	166 10.4				
Both Positive	32.2%	37.9%	0.0%	0.0%	516 32.2				
Total	1566	29	2	4	1601				
%	100	100	100	100	100				

	Numbe	er of Sexual Partne	ers			
	One	Two	3 or more	Total	%	_
Webs HIV Status						
Negative/don't know	23.5%	13.4%	18.8%	266	16.6	
Both negative	45.7%	27.9%	34.5%	525	32.8	
Positive/don't know	4.8%	9.0%	8.1%	128	8.0	
Positive/Negative	6.2%	12.3%	9.0%	166	10.4	
Both positive	19.7%	37.4%	29.6%	516	32.2	
Total	298	903	409	1601		
%	100	100	100	100		

Sexual Webs Status by Number of Sexual Partners

Note. The source of data is from field survey, 2014

Table A6.19

Sexual Webs HIV Status by Choice of Condoms Brand

	С	hoice of Condo	ms Brand by Res	pondents			
	Gold circle	Rough rider	Lifestyle	Fantasy	Others	Total	%
Webs HIV Status							
Negative/don't know	13.2%	11.4%	25.0%	0.0%	9.8%	166	12.9
Both negative	30.1%	46.3%	27.3%	55.0%	41.2%	424	33.0
Positive/don't know	8.4%	4.1%	4.5%	22.5%	9.8%	106	8.3
Positive/Negative	12.0%	7.3%	4.5%	10.0%	13.7%	144	11.2
Both positive	36.4%	30.9%	38.6%	12.5%	25.5%	444	34.6
Total	1026	123	44	40	51	1284	
%	100	100	100	100	100	100	

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for those who had ever used condoms only.

	l	Reasons for Cho	pice of Condoms	Brand			
	Availability	Cheap	Pleasure	Quality	Others	Total	%
Webs HIV Status							
Negative/don't know	17.2%	21.3%	14.5%	9.5%	20.0%	196	18.5
Both negative	37.1%	57.4%	43.5%	39.0%	26.7%	152	14.4
Positive/don't know	5.9%	4.9%	10.0%	6.4%	10.0%	77	7.3
Positive/Negative	8.3%	1.6%	10.0%	10.4%	20.0%	536	50.7
Both positive	31.6%	14.8%	21.8%	34.7%	23.0%	24	2.3
Total	529	61	110	326	30	1056	
%	100	100	100	100	100	100	

Sexual Webs HIV Status by Reasons for Choice of Condoms Brand

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for those who had ever used condoms only.

Condoms Breakage during Usage								
	Yes	No	Never used	Total	%			
Webs HIV Status								
Negative/don't know	11.2%	14.9%	31.9%	266	16.6			
Both negative	34.2%	31.1%	32.8%	525	32.8			
Positive/don't know	9.3%	7.1%	6.6%	128	8.0			
Positive/Negative	10.5%	12.3%	6.6%	166	10.4			
Both positive	34.9%	34.5%	22.1%	516	32.2			
Total	708	576	317	1601				
%	100	100	100	100				
	Condoms	Slip off during U	Isage					
Negative/don't know	10.0%	14.1%	31.9%	266	16.6			
Both negative	27.6%	35.1%	32.8%	525	32.8			
Positive/don't know	8.0%	8.5%	6.6%	128	8.0			
Positive/Negative	9.3%	12.2%	6.6%	166	10.4			
Both positive	45.1%	30.1%	22.1%	516	32.2			
Total	399	885	317	1601				
%	100	100	100	100				

Sexual Webs HIV Status by Condom Breakage, and by Slip off during Usage

Note. The source of data is from field survey, 2014

Table A6.22

Sexual Webs HIV Status by Reasons for not using Condoms

		Reasons fo	or not using	Condoms					
	Don't know where to get it	It is expensive	Reduce pleasure	Generally scare	Need children	Not heard or needed	other	Total	%
Sexual Webs HIV status									
Negative/don't know	31.1%	14.3%	15.8%	20.0%	13.2%	10.1%	42.5%	266	16.6
Both negative	47.8%	17.9%	32.1%	27.3%	44.2%	14.4%	32.8%	525	32.8
Positive/don't know	1.5%	10.7%	8.9%	16.4%	5.1%	12.1%	6.0%	128	8.0
Positive/Negative	1.5%	17.9%	9.7%	9.1%	6.3%	19.7%	8.2%	166	10.4
Both positive	17.95%	39.3%	33.4%	27.3%	31.2%	43.7%	10.4%	516	32.2
Total	67	28	392	55	570	355	134	1601	
%	100	100	100	100	100	100	100	100	

	Condoms Usage in the last Six Months							
	Did not use	Used sometimes	Used always	Never used	Total	%		
Webs HIV Status								
Negative/don't know	23.1%	12.5%	11.5%	31.5%	266	16.6		
Both negative	35.9%	35.7%	22.7%	32.8%	525	32.8		
Positive/don't know	5.1%	8.2%	9.8%	6.6%	128	8.0		
Positive/Negative	6.4%	9.7%	17.8%	6.6%	166	10.4		
Both positive	29.5%	34.0%	31.1%	22.4%	516	32.2		
Total	78	920	286	317	1601			
%	100	100	100	100	100			

Sexual Webs HIV Status by Condoms Usage in the last Six Months

Note. The source of data is from field survey, 2014

Table A6.24

Sexual Webs HIV Status by Sex while Drunk

		Sex while Drun	k		
	Yes	No	Never used	Total	%
Webs HIV Status					
Negative/don't know	16.8%	16.2%	16.6%	266	16.6
Both negative	40.2%	38.0%	28.6%	525	32.8
Positive/don't know	8.0%	8.5%	7.8%	128	8.0
Positive/Negative	8.3%	11.5%	10.9%	166	10.4
Both positive	27.6%	25.6%	36.0%	516	32.2
Total	386	234	981	1601	
%	100	100	100	100	

	Type of Alcohol Consumed by Respondents								
	Ogogoro	Burukutuu	Beer	Palm wine	Others	Never drank	Total	%	
Webs HIV	status								
Negative/don't know	29.6%	17.0%	8.9%	17.4%	36.7%	16.6%	266	16.6	
Both negative	35.2%	39.8%	37.7%	40.4%	48.3%	28.7%	525	32.8	
Positive/don't know	8.5%	3.4%	10.3%	8.3%	5.0%	7.8%	128	8.0	
Positive/Negativ e	12.7%	11.4%	10.3%	8.3%	3.3%	10.8%	166	10.4	
Both positive	14.1%	28.4%	32.9%	25.7%	6.7%	36.0%	516	32.2	
Total	71	88	292	109	60	981	1601		
%	100	100	100	100	100	100	100		

Sexual Webs HIV Status by Types of Alcohol Consumed

Note. The source of data is from field survey, 2014

Table A6.26

Sexual Webs HIV Status by Number of Times Respondents Drink in a week; and by Types of Drug Consumed

	Number of times Respondents Drink in a Week										
	1 time	2 times	3 times	More than 3 times	Total	%					
Webs HIV Status											
Negative/don't know	13.8%	13.0%	14.1%	29.7%	103	16.6					
Both negative	42.5%	43.5%	36.6%	30.5%	243	39.2					
Positive/don't know	7.8%	8.3%	4.2%	13.6%	51	8.2					
Positive/Negative	12.0%	9.3%	9.9%	5.9%	59	9.5					
Both positive	24.0%	25.9%	35.2%	20.3%	164	26.5					
Total	167	193	142	118	620						
%	100	100	100	100	100						
		Types of Drug	gs taken by Re	spondents							
	Solution	Cannabis	Traditional	Others	Total	%					
Negative/don't know	14.3%	30.8%	24.5%	0.0%	17	24.3					
Both negative	14.3%	38.5%	30.6%	100%	22	31.4					
Positive/don't know	0.0%	7.7%	14.3%	0.0%	8	11.4					
Positive/Negative	0.0%	7.7%	6.1%	0.0%	4	5.7					
Both positive	71.4%	15.4%	24.5%	0.0%	19	27.1					
Total	7	13	49	1	70						
%	100	100	100	100	100						

Note. The source of data is from field survey, 2014. The total is less than 1601 for both cases because the questions are only for alcohol and drug consumers.

Age of Relationship (Years)										
	Less than 1yr	Over 1 but less than 5yrs	Over 5yrs	Total	%					
Webs HIV Status										
Negative/don't know	21.3%	19.1%	11.0%	266	16.6					
Both negative	26.3%	35.4%	33.4%	525	32.8					
Positive/don't know	11.7%	6.8%	7.3%	128	8.0					
Positive/Negative	10.2%	9.5%	11.5%	166	10.4					
Both positive	30.5%	29.2%	36.9%	516	32.2					
Total	334	692	575	1601						
%	100	100	100	100						
		Number of Wives								
	One	Two	More than 2	Total	%					
Negative/don't know	19.7%	15.8%	12.5%	136	16.0					
Both negative	55.6%	29.0%	28.3%	128	33.3					
Positive/don't know	4.2%	11.4%	15.8%	92	10.8					
Positive/Negative	4.2%	11.9%	10.0%	88	10.3					
Both positive	16.2%	32.0%	33.3%	252	29.6					
Total	142	590	120	852						
%	100	100	100	100						

Sexual Webs HIV Status by Age of Relationship, and Number of Wives

Note. The source of data is from field survey, 2014

Table A6. 28

Sexual webs HIV Status by Knowledge of whether many People are infected with HIV

Knowledge of whether many are infected with HIV										
	Strongly disagree	Disagree	Agree	Strongly disagree	Total	%				
Webs HIV Status										
Negative/don't know	19.2%	43.6%	17.1%	12.4%	266	16.6				
Both negative	23.1%	40.4%	28.3%	37.0%	525	32.8				
Positive/don't know	0.0%	3.2%	9.4%	7.4%	128	8.0				
Positive/Negative	26.9%	4.3%	11.6%	9.2%	166	10.4				
Both positive	30.8%	8.5%	33.5%	34.0%	516	32.2				
Total	26	94	764	717	1601					
%	100	100	100	100	100					

	Knowledge of Source of Spread of HIV										
	Unprotected casual sex	Blood transfusion	Sharing Syringes or Needles	Others	Don't know	Total	%				
Webs HIV Status											
Negative/Don't know	13.3%	20.9%	8.8%	13.5%	40.1%	266	16.6				
Both Negative	13.3%	19.4%	33.8%	45.9%	50.6%	525	32.8				
Positive/Don't know	9.1%	9.4%	1.3%	8.1%	2.3%	128	8.0				
Positive/Negative	11.2%	13.7%	11.3%	10.8%	1.7%	166	10.4				
Both positive	35.1%	36.7%	45.0%	21.6%	5.2%	516	32.2				
Total	1173	139	80	37	172	1601					
%	100	100	100	100	100	100	100				

Sexual Webs HIV Status by Sources of Spread of HIV

Note. The source of data is from field survey, 2014

Table A6.30

Sexual Webs HIV Status by Satisfaction with the Primary Relationship,

	Respondents' Satisfaction with Primary Relationship										
	Not satisfied	Somewhat satisfied	Satisfied	Highly satisfied	Total	%					
Webs HIV Status											
Negative/don't know	15.2%	32.4%	15.1%	7.6%	266	16.6					
Both negative	43.5%	36.0%	31.9%	29.5%	525	32.8					
Positive/don't know	10.9%	6.3%	8.1%	8.3%	128	8.0					
Positive/Negative	6.5%	7.4%	10.3%	14.6%	166	10.4					
Both positive	23.9%	18.0%	34.7%	40.1%	516	32.2					
Total	92	272	935	302	1601						
%	100	100	100	100	100						

Levels of Sexual Intimacy												
	No intimacy	Very low	Low	Moderate	High	Very high	Total	%				
Webs HIV status												
Negative/don't know	26.2%	17.6%	16.7%	11.6%	88.4%	0.0%	266	16.6				
Both negative	30.0%	25.8%	27.2%	31.2%	0.0%	87.7%	525	32.8				
Positive/don't know	12.4%	7.8%	5.3%	7.9%	11.6%	0.0%	128	8.0				
Positive/Negative	8.2%	12.3%	11.4%	12.0%	0.0%	1,9%	166	10.4				
Both positive	23.2%	36.5%	39.5%	37.4%	0.0%	10.4	516	32.2				
Total	267	244	114	827	43	106	1601					
%	100	100	100	100	100	100	100					

Sexual Webs HIV Status by Levels of Sexual Intimacy

APPENDIX A7

Tables Showing Bivariate Relationships between Sexual Intimacy, and Sexual Capacity,Motivations, Performance, HIV, and Sexual Webs Variables

Table A7. 1

Levels of Sexual Intimacy by Location of Respondents' Residence

	Location of Respondents' Residence										
	Urban-Ipusu	Urban-	Rural-Ipusu	Rural-	Total	%					
		Ichongu		Ichongu							
Levels of intimacy											
No Intimacy	11.4%	17.6%	13.9%	24.0%	267	16.7					
Very low intimacy	18.5%	15.5%	11.6%	15.3%	244	15.2					
Low intimacy	7.8%	7.6%	5.8%	7.2%	114	7.1					
Moderate intimacy	61.3%	55.7%	45.6%	43.8%	827	51.7					
High intimacy	0.0%	0.3%	5.5%	4.0%	43	2.7					
Very High intimacy	1.0%	2.3%	17.6%	5.8%	106	6.6					
Total	411	394	396	400	1601						
%	100	100	100	100	100						

Note. The source of data is from Field survey, 2014

Table A7.2

Levels of Sexual Intimacy by Age of Respondents (Age Interval in Years)

		Age of Respondents (interval in years)								
	18-19yrs	20-24yrs	25-29yrs	30-34yrs	35-39yrs	40-44yrs				
Levels of Intimacy										
No Intimacy	17.8%	20.5%	18.7%	19.6%	8.3%	14.0%				
Very low intimacy	10.4%	14.7%	15.2%	16.1%	15.8%	16.2%				
Low intimacy	9.2%	8.2%	9.1%	4.2%	5.8%	7.4%				
Moderate intimacy	46.0%	49.5%	49.5%	50.9%	61.7%	55.9%				
High intimacy	7.4%	2.4%	29.9%	2.1%	3.3%	0.0%				
Very High intimacy	9.2%	4.8%	5.0%	7.1%	5.0%	6.6%				
Total	163	293	342	336	120	1361				
%	100	100	100	100	100	100				
		Age of Re	espondents Con	tinued						
	45-49yrs	50-54yrs	55-59yrs	60+	Total	%				
No Intimacy	12.2%	7.5%	5.7%	0.0%	267	16.7				
Very low intimacy	16.3%	17.9%	22.9%	9.1%	244	15.2				
Low intimacy	6.1%	4.5%	8.6%	9.1%	114	7.1				
Moderate intimacy	53.1%	61.2%	51.4%	63.6%	827	51.7				
High intimacy	3.1%	0.0%	0.0%	0.0%	43	2.7				
Very High intimacy	9.2%	9.0%	11.4%	18.2%	106	6.6				
Total	98	67	35	11	1601					
%	100	100	100	100	100					

Respondents Levels of Educational Attainment										
	No schooling	g Primary	Secondary	Tertiary	Total	%				
Levels of Intimacy										
No Intimacy	18.0%	16.0%	17.9%	14.9%	267	16.7				
Very low intimacy	21.3%	21.8%	14.6%	12.5%	244	15.2				
Low intimacy Moderate intimacy	7.4% 46.7%	5.3% 48.9%	6.8% 51.4%	8.1% 54.2%	114 827	7.1 51.7				
High intimacy	2.5%	2.7%	2.8%	2.6%	43	22.7				
Very High intimacy	4.1%	5.3%	6.6%	7.7%	106	6.6				
Total	122	188	761	530	1601					
%	100	100	100	100	100	100				
	Part	ners educational	Attainment							
No Intimacy	16.1%	14.8%	15.8%	19.2%	267	16.7				
Very low intimacy	19.7%	20.1%	14.3%	13.55	244	15.2				
Low intimacy Moderate intimacy	6.6% 51.8%	5.7% 51.2%	6.5% 53.2%	8.9% 49.4%	114 827	7.1 51.7				
High intimacy	0.7%	2.4%	4.1%	1.2%	43	22.7				
Very High intimacy	5.1%	5.7%	6.4%	7.9%	106	6.6				
Total	137	209	759	496	1601					
%	100	100	100	100	100	100				

Levels of Sexual Intimacy by Respondents; and by Partners Educational Attainment

Note. The source of data is from field survey, 2014

Table A7.4

Levels of Sexual Intimacy by Relationship Status

	Relationship Status											
	Married	Single	Widowed	Divorced	Separated	Cohabiting	Total	%				
Levels of Intimacy												
No Intimacy	0.7%	28.8%	39.0%	52.2%	36.9%	71.4%	267	16.7				
Very low intimacy	21.8%	7.6%	11.4%	11.9%	6.2%	0.0%	244	15.2				
Low intimacy	6.3%	8.9%	7.3%	0.0%	9.2%	0.0%	114	7.1				
Moderate intimacy	57.6%	48.4%	38.2%	33.9%	47.7%	28.6%	827	51.7				
High intimacy	3.0%	3.2%	0.8%	0.0%	0.0%	0.0%	43	2.7				
Very High intimacy	10.5%	3.0%	3.3%	0.0%	0.0%	0.0%	106	6.6				
Total	820	527	123	59	65	7	1601					
%	100	100	100	100	100	100	100					

	Respondents' Occupation											
	Farming	Civil servant	Business	Students	Unemployment	Others	Total	%				
Leve of Intim	acy											
No Intimacy	12.4%	14.8%	20.4%	20.5%	17.1%	4.7%	267	16.7				
Very low intimacy	20.45	16.3%	14.9%	10.1%	13.1%	11.6%	244	15.2				
Low intimacy	4.7%	6.4%	6.9%	11.2%	6.3%	7.0%	114	7.1				
Moderate intimacy	49.7%	53.7%	52.9%	48.6%	53.7%	69.8%	827	51.7				
High intimacy	3.5%	2.0%	1.1%	3.6%	2.9%	2.3%	43	2.7				
Very High intimacy	9.5%	6.9%	3.9%	6.0%	6.9%	4.7%	106	6.6				
Total	451	203	363	166	175	43	1601					
%	100	100	100	100	100	100	100					

Levels of Sexual Intimacy by Occupation of the Respondents

Note. The source of data is from field survey, 2014

Table A7.6

Levels of Sexual Intimacy by Primary Partner's Main Occupation

	Primary Partner's Main Occupation									
	Farming	Civil servant	Business	Students	Unemployment	Others	Total	%		
Levels of Intin	nacy									
No Intimacy	13.2%	17.0%	17.3%	22.4%	15.5%	10.3%	267	16.7		
Very low intimacy	16.50%	19.0%	15.8%	11.4%	11.3%	17.2%	244	15.2		
Low intimacy	5.1%	7.9%	6.1%	10.7%	8.3%	3.5%	114	7.1		
Moderate intimacy	54.7%	47.0%	55.2%	45.9%	51.8%	51.7%	827	51.7		
High intimacy	2.6%	2.0%	2.0%	3.8%	3.6%	3.4%	43	2.7		
Very High intimacy	7.9%	7.10%	3.6%	5.9%	9.5%	13.8%	106	6.6		
Total	468	253	393	290	168	29	1601			
%	100	100	100	100	100	100	100			

Income of Respondents								
	<25,000	25,000- 4900	500,000- 99,000	100,000+	Total	%		
Levels of Intimacy								
No Intimacy	16.8%	18.8%	11.2%	10.0%	267	16.7		
Very low intimacy	15.3%	14.6%	17.3%	13.3%	244	15.2		
Low intimacy	7.6%	6.6%	5.1%	0.0%	114	7.1		
Moderate intimacy	50.4%	52.2%	57.1%	73.3%	827	51.7		
High intimacy	3.0%	1.7%	1.0%	3.3%	43	2.7		
Very High intimacy	6.9%	5.6%	8.2%	0.0%	106	6.6		
Total	1186	287	98	30	1601			
%	100	100	100	100	100			

Levels of Sexual Intimacy by Income of the Respondents in Thousands of (Naira),

Note. The source of data is from field survey, 2014

Table A7.8

Levels of Sexual Intimacy by Religious Organisation of Respondents

	Respondents' Religious Organisation										
	Catholic	Protestant	Pentecostal	Islam	Traditional	Others	Total	%			
Levels of Intimacy											
No	17.0%	14.2%	19.5%	29.2%	18.6%	25.0%	267	16.7			
Intimacy											
Very low	16.6%	12.2%	18.2%	12.5%	12.9%	0.0%	244	15.2			
intimacy											
Low	8.4%	6.1%	4.2%	0.0%	7.1%	0.0%	114	7.1			
intimacy											
Moderate	47.9%	56.6%	53.9%	50.0%	6.0%	75.0%	827	51.7			
intimacy											
High	3.1%	2.6%	1.8%	4.2%	0.0%	0.0%	43	2.7			
intimacy											
Very High	7.1%	8.3%	2.4%	4.2%	1.4%	0.0%	106	6.6			
intimacy				- <i>i</i>	-						
Total	879	459	165	24	70	4	1601				
%	100	100	100	100	100	100	100				

Levels of Sexual Intimacy by whether Respondent is a Leader in Religious Organisation, and by Attendance of Religious Organisation Activities

	Whether the Respondent is a Leader in Religious Organisation						
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%	
Levels of Intimacy							
No Intimacy	15.0%	16.6%	18.5%	11.7%	267	16.7	
Very low intimacy	16.7%	15.0%	15.3%	14.5%	244	15.2	
Low intimacy	3.9%	7.5%	7.4%	8.3%	114	7.1	
Moderate intimacy	55.6%	51.2%	49.9%	55.9%	827	51.7	
High intimacy	1.7%	3.0%	3.0%	1.4%	43	2.7	
Very High intimacy	7.2%	6.8%	5.8%	8.3%	106	6.6	
Total	180	709	567	145	1601		
%	100	100	100	100	100		
	Attendance of	of Religious Orga	anisation Ac	tivities			
No Intimacy	21.2%	18.1%	16.7%	12.0%	267	16.7	
Very low intimacy	15.4%	14.5%	15.7%	16.4%	244	15.2	
Low intimacy	6.7%	5.5%	6.9%	11.1%	114	7.1	
Moderate intimacy	51.0%	54.0%	50.2%	53.3%	827	51.7	
High intimacy	0.0%	2.4%	3.0%	3.1%	43	2.7	
Very High intimacy	5.8%	5.5%	7.9%	4.0%	106	6.6	
Total	104	415	857	225	1601		
%	100	100	100	100	1601		

Note. The source of data is from field survey, 2014

Table A7.10

Levels of Sexual Intimacy by Types of Family, and by Types of Support from Family

Members

Types of family Respondents have come from								
	Monogamous	Polygamous	Single	Others	Total	%		
Levels of Intimacy								
No Intimacy	13.3%	19.3%	22.4%	0.0%	267	16.7		
Very low intimacy	14.5%	16.6%	9.8%	0.0%	244	15.2		
Low intimacy	7.6%	6.5%	8.5%	0.0%	114	7.1		
Moderate intimacy	52.4%	51.0%	50.0%	100%	827	51.7		
High intimacy	3.3%	2.1%	2.4%	0.0%	43	2.7		
Very High intimacy	8.9%	4.5%	4.9%	0.0%	106	6.6		
Total	760	757	82	2	1601			
%	100	100	100	100	100			
	Types of Support Received from Family Members							
	Money	Material	Material &	No support	Total	%		
			money					
No Intimacy	18.1%	17.7%	31.2%	12.4%	267	16.7		
Very low intimacy	14.9%	18.1%	22.1%	13.5%	244	15.2		
Low intimacy	8.6%	5.9%	3.9%	6.1%	114	7.1		
Moderate intimacy	48.2%	49.4%	42.9%	58.5%	827	51.7		
High intimacy	3.1%	3.8%	0.0%	2.0%	43	2.7		
Very High intimacy	7.1%	5.1%	0.0%	7.6%	106	6.6		
Total	731	237	77	556	1601			
%	100	100	100	100	100			

	Types of Laws Guiding Relationship							
	Religious	Customary	Court laws	Others	Total %			
Levels of Intimacy								
No Intimacy	14.0%	17.1%	25.9%	23.9%	267 16.7			
Very low intimacy	14.9%	15.8%	22.2%	14.2%	244 15.2			
Low intimacy	8.1%	7.0%	0.0%	4.9%	114 7.1			
Moderate intimacy	52.3%	51.9%	51.9%	48.7%	827 51.7			
High intimacy	3.3%	1.6%	0.0%	3.5%	43 2.7			
Very High intimacy	7.4%	6.5%	0.0%	4.9%	106 6.6			
Total	780	568	27	226	1601			
%	100	100	100	100	100			

Levels of Sexual Intimacy by Types of Laws Guiding Sexual Relationship

Note. The source of data is from field survey, 2014.

Table A7.12

Levels of Sexual Intimacy by motivations for Sexual Relationship (love), and by Desire for

Money

	Motivations for Sexual Relationship (Love)							
	Strongly disagree	Disagree	Agree	Strongly agree	Total	%		
Levels of Intimacy					-			
No Intimacy	14.0%	21.2%	18.1%	12.6%	267	16.7		
Very low intimacy	10.5%	16.1%	15.2%	15.8%	244	15.2		
Low intimacy	14.0%	10.2%	6.7%	6.3%	114	7.1		
Moderate intimacy	50.9%	41.5%	51.4%	55.0%	827	51.7		
High intimacy	3.5%	3.4%	2.4%	2.9%	43	2.7		
Very High intimacy	7.0%	7.6%	6.1%	7.4%	106	6.6		
Total	57	118	982	444	1601			
%	100	100	100	100	100			
		Need Mone	ey					
No Intimacy	17.7%	13.0%	23.8%	19.0%	267	16.7		
Very low intimacy	14.1%	13.7%	17.2%	18.3%	244	15.2		
Low intimacy	7.2%	7.7%	5.7%	9.5%	114	7.1		
Moderate intimacy	57.4%	53.5%	46.9%	47.6%	827	51.7		
High intimacy	2.4%	3.7%	1.6%	2.4%	43	2.7		
Very High intimacy	7.2%	8.3%	4.9%	3.2%	106	6.6		
Total	291	671	512	127	1601			
%	100	100	100	100	100			

Table A7.13a

Levels of Sexual Intimacy by motivations for Sexual Relationship (Desire for children and Pleasure)

	Motivations for Sexual Relationship (Desire for children)									
	Strongly disagree	Disagree	Agree	Strongly agree	Total %					
Levels of intimacy										
No Intimacy	23.0%	23.3%	15.2%	12.4%	267 16.7					
Very low intimacy	12.0%	11.6%	16.1%	17.4%	244 15.3					
Low intimacy	6.0%	6.6%	8.0%	6.3%	114 7.1					
Moderate intimacy	44.0%	52.8%	51.0%	53.7%	827 51.7					
High intimacy	4.0%	2.4%	2.6%	2.7%	43 2.7					
Very High intimacy	11.0%	3.3%	7.1%	7.4%	106 6.6					
Total	100	335	722	444	1601					
%	100	100	100	100	100					
	Desir	e for Pleasure								
No Intimacy	16.9%	16.2%	16.1%	18.1%	267 16.7					
Very low intimacy	11.8%	16.9%%	16.4%	12.5%	244 15.2					
Low intimacy	10.3%	6.8%	6.8%	6.9%	114 7.1					
Moderate intimacy	52.2%	51.6%	50.5%	53.9%	827 51.7					
High intimacy	3.7%	2.5%	3.2%	1.7%	43 2.7					
Very High intimacy	5.1%	5.9%	7.2%	6.9%	106 6.6					
Total	136	438	666	361	1601					
%	100	100	100	100	100					

Table A7.13b

Levels of Sexual Intimacy by motivations for Sexual Relationship (Need a Place to Live and Desire for Favours)

Motivations for Sexual Relationship (Like child)									
Levels of intimacy	Strongly disagree	Disagree	Agree	Strongly agree	Total %				
	Need	a Place to live							
No Intimacy	12.4%	15.6%	20.1%	22.9%	267 16.7				
Very low intimacy	12.7%	14.0%	18.3%	18.3%	244 15.2				
Low intimacy	5.4%	6.4%	9.7%	6.4%	114 7.1				
Moderate intimacy	60.1%	51.3%	46.8%	47.7%	827 51.7				
High intimacy	2.7%	3.3%	1.8%	1.8%	43 2.7				
Very High intimacy	6.6%	9.3%	3.2%	2.8%	106 6.6				
Total	331	719	442	109	1601				
%	100	100	100	100	100				
	Desire	Favours							
No Intimacy	8.0%	11.8%	21.8%	27.8%	267 16.7				
Very low intimacy	14.6%	13.8%	15.5%	19.8%	244 15.2				
Low intimacy	5.0%	7.2%	7.8%	8.0%	114 7.1				
Moderate intimacy	62.1%	52.7%	49.3%	38.3%	827 51.7				
High intimacy	2.0%	4.0%	1.9%	3.1%	43 2.7				
Very High intimacy	8.3%	10.4%	3.8%	3.1%	106 6.6				
Total	301	499	639	162	1601				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014

Table A7.14

Sexual Intimacy by Combined Motivations of Love, Money and Children for Relationships

Combined Motivations of Love, Money and Child								
	Either love or money or	Child and money	Love and money	Love and child	Love and money and	Total	%	
	child				child			
Sexual intimacy								
No intimacy	19.5%	26.0%	23.5%	9.2%	21.6%	267	16.7	
Very low intimacy	11.7%	20.5%	10.8%	15.2%	18.6%	244	15.2	
Low intimacy	7.5%	5.5%	10.8%	7.2%	6.0%	114	7.1	
Moderate intimacy	51.4%	41.1%	48.0%	56.5%	47.7%	827	51.7	
High intimacy	3.6%	0.0%	2.9%	3.3%	1.4%	43	2.7	
Very high intimacy	6.2%	6.8%	3.9%	8.7%	4.7%	106	6.6	
Total	385	73	102	611	430	1601		
%	100	100	100	100	100	100		

Combined Motivations of Pleasure, Place and Favour									
	Either pleasure or place or favour	Place and favour	Pleasure and place	Pleasure and favour	Pleasure and place and favour	Total	. %		
Sexual intimacy									
No intimacy	12.0%	22.9%	11.8%	23.8%	23.0%	267	16.7		
Very low intimacy	14.3%	14.7%	21.5%	12.3%	18.5%	244	15.2		
Low intimacy	6.1%	9.2%	11.8%	7.4%	7.7%	114	7.1		
Moderate intimacy	55.0%	45.0%	47.3%	50.0%	47.6%	827	51.7		
High intimacy	3.3%	2.8%	4.3%	2.0%	1.0%	43	2.7		
Very high intimacy	9.4%	5.5%	3.2%	4.5%	2.2%	106	6.6		
Total	842	109	93	244	313	1601			
%	100	100	100	100	100	100			

Sexual Intimacy by Combined Motivations of Pleasure, Place and Favour for Relationships

Note. The source of data is from field survey, 2014

Table A7.16

Levels of Sexual Intimacy by Duration without Primary Partner

	Period of Time away from Partner								
	3months	3 months or more but less than six	6 months or more but less than 9	9 months of more but less than 1yr	1 year or more	Total	%		
Levels of Intimacy									
No Intimacy	12.1%	20.1%	21.5%	19.2%	34.7%	267	16.7		
Very low intimacy	14.1%	15.1%	9.3%	26.9%	18.8%	244	15.2		
Low intimacy	7.7%	6.5%	8.4%	5.8%	8.9%	114	7.1		
Moderate intimacy	56.8%	48.3%	52.3%	39.4%	32.7%	827	51.7		
High	2.8%	2.2%	3.7%	3.8%	2.0%	43	2.7		
Very High intimacy	6.9%	7.9%	4.7%	4.8%	3.0%	106	6.6		
Total	871	418	107	104	101	1601			
%	100	100	100	100	100	100			

Levels of Sexual Intimacy by Number of Children with Primary Partner; and by Number of Children with other Partners,

Number of Children with Primary Partner									
	No child	One	Two	3 or more	Total	%			
Levels of Intimacy									
No Intimacy	24.8	14.8%	6.6%	7.0%	267	16.7			
Very low intimacy	1.0%	15.2%	14.5%	23.1%	244	15.2			
Low intimacy	7.9%	6.5%	5.9%	7.0%	114	7.1			
Moderate intimacy	44.0%	52.9%	61.0%	50.7%	827	51.7			
High intimacy	2.9%	2.3%	3.4%	1.7%	43	2.7			
Very High intimacy	3.8%	8.4%	8.4%	10.5%	106	6.6			
Total	762	263	290	286	1601				
%	100	100	100	100	100				
	Chi	ldren with othe	r Partners						
No Intimacy	17.9%	26.8%	27.4%	22.8%	266	20.2			
Very low intimacy	17.5%	24.8%	18.5%	18.4%	243	18.5			
Low intimacy	1.9%	2.0%	1.6%	0.0%	23	1.8			
Moderate intimacy	62.6%	46.3%	52.4%	58.8%	780	59.5			
High intimacy	0.0%	0.0%	0.0%	0.0%	0.0	0.0			
Very High intimacy	0.0%	0.0%	0.0%	0.0%	0.0	0.0			
Total	925	149	124	114	1312				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014. The total is less than 1601 in the case of children with other partners because not all have other sexual partners.

Table A7. 18

Levels of Sexual Intimacy by Receipt of Partners' Assistance

	Receipt of Partners Assistance							
	Yes	No	Total	%				
Levels of Intimacy								
No Intimacy	17.7%	14.3%	267	16.7				
Very low intimacy	16.8%	11.6%	244	15.2				
Low intimacy	7.5%	6.3%	144	7.1				
Moderate intimacy	48.6%	58.9%	827	51.7				
High intimacy	2.7%	2.7%	43	2.7				
Very High intimacy	6.8%	6.1%	106	6.6				
Total	1126	475	1601					
%	100	100	100					

	Types of Sexual Relationship									
	Heterosexual	Bisexual	Lesbian	Homosexual	Total	%				
Levels of Intimacy										
No Intimacy	16.7%	17.2%	50.0%	0.0%	267	16.7				
Very low intimacy	15.2%	17.2%	0.0%	25.0%	244	15.2				
Low intimacy	7.2%	3.4%	0.0%	0.0%	114	7.1				
Moderate intimacy	51.6%	51.7%	50.0%	75.0%	827	51.7				
High intimacy	2.7%	0.0%	0.0%	0.0%	43	2.7				
Very High intimacy	6.6%	10.3%	0.0%	0.0%	106	6.6				
Total	1566	29	2	4	1601					
%	100	100	100	100	100					

Levels of Sexual Intimacy by Types of Sexual Relationships

Note. The source of data is from field survey, 2014.

Table A7.20

Levels of Sexual Intimacy by Choice of Condoms Brand

	Choice of Condoms Brand									
	Gold circle	Rough rider	Lifestyle	Fantasy	Others	Total	%			
Levels of In	timacy									
No Intimacy	16.3%	22.0%	22.7%	17.5%	21.6%	222	17.3			
Very low intimacy	14.8%	19.5%	15.9%	2.5%	17.6%	193	15.0			
Low intimacy	7.9%	1.6%	4.5%	10.0%	5.9%	92	7.2			
Moderate intimacy	52.0%	54.5%	56.8%	57.5%	51.0%	675	52.6			
High intimacy	2.5%	0.8%	0.0%	0.0%	0.0%	27	2.1			
Very High intimacy	6.4%	1.6%	0.0%	12.5%	3.9%	75	5.8			
Total	1026	123	44	40	51	1284				
%	100	100	100	100	100	100				

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for condoms users only.

Reasons for choice of Condoms Brand Availability Cheap Pleasure Quality Others Total % Levels of Intimacy 19.8% 19.7% 13.6% 17.5% 16.7% 194 18.5 No Intimacy Very low 14.4% 16.4 13.6% 14.7% 10.0% 152 14.4 intimacy 11.5% 6.4% 6.7% 77 7.3 Low 7.6% 6.4% intimacy Moderate 49.3% 44.3% 50.9% 53.4% 60.0% 536 50.8 intimacy High 4.9% 0.9% 0.0% 2.3 2.3% 5.5% 24 intimacy Very High 6.6%3.3% 10.0% 7.1% 6.7% 73 6.9 intimacy Total 529 61 110 326 30 1056 100 100 100 % 100 100 100

Levels of Sexual Intimacy by Reasons for Choice of Condoms Brand

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for condoms users only.

Table A7.22

Table A7.21

Levels of Sexual Intimacy by Usage in last Six Months Preceding Interviews

Condoms usage in the Last Six Months Preceding Interviews									
	Did not use	Used sometimes	Used always	Never used	Total	%			
Levels of Intimacy									
No Intimacy	12.8%	17.9%	16.4%	14.2%	267	16.7			
Very low intimacy	19.2%	15.8%	11.5%	16.1%	244	15.2			
Low intimacy	5.1%	7.0%	8.4%	6.9%	114	7.1			
Moderate intimacy	47.4%	51.1%	58.7%	47.9%	827	51.7			
High intimacy	3.8%	2.1%	1.7%	5.0%	43	2.7			
Very High intimacy	11.5%	6.2%	3.1%	9.8%	106	6.6			
Total	78	920	286	317	1601				
%	100	100	100	100	100				

	Reasons for not using Condoms									
	Don't know where to get it	It is expensive	Reduce pleasure	Generally scare	Need children	Not heard or needed	other	Total	%	
Levels of Intimacy										
No Intimacy	16.4%	17.9%	26.3%	30.9%	10.0%	12.4%	22.4%	267	16.7	
Very low	13.4%	21.4%	14.5%	14.5%	15.4%	14.6%	17.9%	244	15.2	
Low	9.0%	3.6%	7.4%	10.9%	7.5%	6.8%	3.7%	114	7.1	
Moderate	44.8%	50.0%	45.2%	36.4%	53.9%	61.1%	46.3%	827	51.7	
High	6.0%	0.0%	1.3%	1.8%	3.9%	1.4%	4.5%	43	2.7	
Very high	10.4%	7.1%	5.4%	5.5%	9.3%	3.7%	5.2%	106	6.6	
intimacy Total	67	28	392	55	570	355	134	1601		
%	100	100	100	100	100	100	100	100		

Levels of Sexual Intimacy by Reasons for not using Condoms

Note. The source of data is from field survey, 2014

Table A7.24

Sexual Intimacy by Types of Alcohol consumed by the Respondents,

		Tyj	pe of Alcoh	ol Consumed by	y Responde	ents		
	Ogogoro	Burukutuu	Beer	Palm wine	Others	Never drank	Total	%
Levels of Intimacy								
No Intimacy	25.4%	28.4%	21.2%	14.7%	28.3%	13.1%	267	16.7
Very low intimacy	19.7%	20.5%	21.6%	26.6%	10.0%	11.6%	244	15.2
Low intimacy	2.8%	5.7%	4.8%	2.8%	5.0%	8.9%	114	7.1
Moderate intimacy	43.7%	39.8%	43.2%	47.7%	51.7%	56.3%	827	51.7
High intimacy	2.8%	1.1%	2.1%	2.8%	0.0%	3.2%	43	2.7
Very High intimacy	5.6%	4.5%	7.2%	5.5%	5.0%	6.9%	106	6.6
Total	71	88	292	109	60	981	1601	
%	100	100	100	100	100	100	100	

Note. The source of data is from field Study, 2014.

Number of Times Respondents Drink in a Week										
	1 time	2 times	3 times	3 times or more	Total	%				
Levels of Intimacy										
No Intimacy	16.8%	24.4%	23.9%	25.4%	138	22.3				
Very low intimacy	22.8%	18.1%	28.9%	13.6%	130	21.0				
Low intimacy	5.4%	3.6%	4.2%	4.2%	27	4.4				
Moderate intimacy	44.3%	46.1%	34.5%	53.4%	275	44.4				
High intimacy	2.4%	2.6%	1.4%	0.8%	12	1.9				
Very High intimacy	8.4%	5.2%	7.7%	2.5%	38	6.1				
Total	167	193	142	118	620					
%	100	100	100	100	100					

Levels of Sexual Intimacy by Number of Times they drink in a Week

Note. The source of data is from field Study, 2014. The total is less than 1601 in the case of number of times respondents drink in a week because the question is for those who consume alcohol only

Table A7.26

Sexual Intimacy by Types of Drug Taken by Respondents

Types of Drugs taken by Respondents									
	Solution	Cannabis	Traditional	Others	Total	%			
Levels of Intimacy									
No Intimacy	28.6%	69.2%	16.3%	100.0%	207	28.6			
Very low intimacy	14.3%	7.7%	16.3%	0.0%	10	14.3			
Low intimacy	0.0%	7.7%	8.2%	0.0%	5	7.1			
Moderate intimacy	57.1%	15.4%	55.1%	0.0%	33	47.1			
High intimacy	0.0%	0.0%	0.0%	0.0%	0	0.0			
Very High intimacy	0.0%	0.0%	4.1%	0.0%	2	2.9			
Total	7	13	49	1	70				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014. The total is less than 1601 in the case of Drugs taken by respondents because the question is for drug users only

	Age of R	elationship (inter	val in years)		
	Less than 1yr.	1 yr but less than 5 yrs.	Over 5yrs.	Total	%
Levels of Intimacy					
No Intimacy	24.0%	21.4%	6.8%	267	16.7
Very low intimacy	11.4%	16.3%	16.2%	244	15.2
Low intimacy	10.5%	5.8%	6.8%	114	7.1
Moderate intimacy	47.9%	49.3%	56.7%	827	51.7
High intimacy	2.4%	2.5%	3.1%	43	2.7
Very High intimacy	3.9%	4.8%	10.4%	106	6.6
Total	334	692	575	1601	
%	100	100	100	100	
	Number of	Sexual partners			
	One	Two	3 or more	Total	%
No Intimacy	0.0%	15.1%	32.0%	267	16.7
Very low intimacy	0.0%	18.9%	17.8%	244	15.2
Low intimacy	33.6%	1.8%	0.2%	114	7.1
Moderate intimacy	14.9%	64.2%	49.9%	827	51.7
High intimacy	14.9%	0.0%	0.0%	43	2.7
Very High intimacy	36.7%	0.0%	0.0%	106	6.6
Total	289	903	409	1601	
%	100	100	100	100	

Levels of Sexual Intimacy by Age of Relationship, and by number of Sexual partners

	Knowledge of Source of Spread of HIV										
	Unprotected casual sex	Blood transfusion	Sharing Syringes or Needles	Others	Don't know	Total	%				
Levels of Intimacy											
No Intimacy	15.9%	9.4%	15.0%	10.8%	21.5%	267	16.7				
Very low intimacy	13.6%	29.5%	22.5%	10.8%	12.8%	244	15.2				
Low intimacy	6.4%	7.2%	10.0%	13.5%	9.3%	114	7.1				
Moderate intimacy	53.9%	40.3%	47.5%	48.6%	48.3%	827	51.7				
High intimacy	2.3%	1.4%	0.0%	2.7%	7.6%	43	2.7				
Very High intimacy	7.9%	2.2%	5.0%	13.5%	0.6%	106	6.6				
Total	1173	139	81	37	172	1601					
%	100	100	100	100	100	100	100				

Levels of Sexual Intimacy by Knowledge of Sources of Spread of HIV

Note. The source of data is from field survey, 2014

Table A7.29

Levels of Sexual Intimacy by the Attitude of feeling bad if infected with HIV

Will feel bad if infected with HIV									
	Strongly disagree	Disagree	Agree	Strongly disagree	Total	%			
Levels of Intimacy									
No Intimacy	2.7%	24.1%	21.8%	16.7%	267	16.7			
Very low intimacy	33.3%	24.1%	14.7%	10.7%	244	15.2			
Low intimacy	6.7%	3.4%	4.9%	7.9%	114	7.1			
Moderate intimacy	26.7%	24.1%	42.7%	48.8%	827	51.7			
High intimacy	10.0%	13.8%	3.6%	4.4%	43	2.7			
Very High intimacy	10.0%	10.3%	12.4%	11.4%	106	6.6			
Total	30	29	307	430	1601				
%	100	100	100	100	100				

	Satisfaction with Current Relationship									
	Not satisfied	Somewhat satisfied	Satisfied	Highly satisfied	Total	%				
Levels of Intimacy										
No Intimacy	26.1%	32.7%	13.0%	10.6%	267	16.7				
Very low intimacy	21.7%	20.2%	14.5%	10.9%	244	15.2				
Low intimacy	9.8%	6.6%	7.4%	6.0%	114	7.1				
Moderate intimacy	39.1%	37.1%	55.5%	56.6%	827	51.7				
High intimacy	3.3%	1.1%	2.9%	3.3%	43	2.7				
Very High intimacy	0.0%	2.2%	6.6%	12.6%	106	6.6				
Total	29	272	935	302	1601					
%	100	100	100	100	100					

Levels of Sexual Intimacy and by Satisfaction with current Relationship

APPENDIX A8

Models Showing the Relationship between Sexual Intimacy and Independent Variables

A8. 1 Sexual Capacity Variables and Sexual Intimacy Model

In describing the relationship between capacity variables and sexual intimacy, the general assumption is that all the other variables in the model are held constant at zero except the variable of interest in relation to the dependent variable. With regard to relationship status, the married group is the reference group. The odds are reduced by 69.7% (100-30.3) for those that are single in comparison with the married, to be in very high intimacy relationship relative to those cohabiting versus the married; for those cohabiting in comparison with the married; the odds are reduced by 93.6% for them to be in very high intimacy relationship relative to the single versus the married.

With regard to educational attainment, the tertiary level is the reference group amongst the levels of education. The odds are reduced by 40.5% for partners who are in nonschooling group in comparison with partners in the tertiary, to be in very high intimacy relationship relative to primary versus tertiary; and secondary versus tertiary levels of education. For those that are in the primary versus tertiary levels, the odds are reduced by 28.1% for them to be in very high intimacy relative to no schooling versus tertiary, and secondary versus tertiary; while for the secondary versus tertiary levels, the odds are reduced by 10.3% for them to be in very high intimacy relative to no schooling versus tertiary, and primary versus tertiary.

Similarly, the odds are reduced by 53.0% for partners in monogamous family versus others (separated, divorced) to be in very high intimacy relative to partners in polygamous versus others; and single versus others. The odds for partners in polygamous versus others are reduced by 68.3% for them to be in very high intimacy relative to monogamous versus others, and single versus others; while for partners in single versus other families, the odds are reduced by 66.1% for them to be in very high intimacy relative to monogamous versus others, and polygamous versus others.

Regarding the support partners get from family members and sexual intimacy, the odds are reduced by 18.1% for those who receive money as support in comparison with those who don't receive any support, to be in very high intimacy relationship relative to those who receive material support versus those who don't receive support; and those who receive both money and material supports versus those who don't receive support. Furthermore, the odds

are reduced by 16.2% for those who receive material support versus those who don't receive support to be in very high intimacy relative to those who receive money versus those who don't receive any support, and those who receive both money and material supports versus those who don't receive support; while the odds are reduced by 66.1% for those who receive both money and materials versus those who don't receive support, to be in very high intimacy relationship relative to those who receive money as support versus those who don't receive support; and those who receive material support versus those who don't receive support. Hotels have negative slope but the relationship with the dependent variable is not significant (See Table A8.1)

Table A8.1

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		Std	Test of Significance		Odda	95% Confidence Interval	
Variables	В	Stu. Error	Df	Sig.	Ratio	Lower	Upper
No intimacy	-3.471	.3737	1	0.000	.031	.015	.065
Very low intimacy	-2.537	.3730	1	.000	.079	.038	.164
Low intimacy	-2.209	.3716	1	.000	.110	.053	.228
Moderate intimacy	.707	.3650	1	.053	2.028	.992	4.147
High intimacy	1.090	.3717	1	.003	2.975	1.436	6.164
Relationship status							
Single	-1.193	.0991	1	0.000	.303	.250	.368
Cohabiting	-2.750	1.0889	1	.012	.064	.008	.540
Education							
No schooling	519	.1913	1	.007	.595	.409	.866
Primary	331	.1652	1	.045	.719	.520	.993
Secondary	109	.1145	1	.342	.897	.717	1.123
Family Types							
Monogamous	756	.3426	1	.027	.470	.240	.919
Polygamous	-1.150	.3433	1	.001	.317	.162	.621
Single	-1.082	.4066	1	.008	.339	.153	.752
Types of family support							
Money	199	.1137	1	.080	.819	.656	1.024
Material	177	.1520	1	.245	.838	.622	1.129
Money & Material	-1.082	.2349	1	.000	.339	.214	.537
Hotel influence							
Strongly disagree	231	.2631	1	.381	.794	.474	1.330
Disagree	.307	.2051	1	.134	1.360	.910	2.033
Agree	.124	.1072	1	.247	1.132	.918	1.397

Note. The source of the data is from field survey, 2014. The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis). The dependent variable

is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Reference group = Very high sexual intimacy; Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print. The independent variables are Relationship status (reference group = married; Education (reference group = tertiary); Family types (reference group = others); Types of family support (reference group = no support), Hotel influence on sex (reference group = strongly agree).

A8.2 Sexual Intimacy and Motivation Variables Model

As it was in the case of the other models, the relationship between the dependent and independent variables will be described using the assumption that all other variables in the model are held constant at zero except the variable of interest. The variables in the model are the ones that have remained consistently significant after series of controls except for the motivation of 'need money'.

For the purpose of assessing the chances of been in the highest level of sexual intimacy, the strongly agree group will be used as reference. In the case of those motivated by favours to be in sexual relationship, the odds are 3.4 times high for the strongly disagree group in comparison with the strongly agree group, to be in very high intimacy relationship relative to disagree group versus strongly agree group, and agree group versus strongly agree group. Similarly, the odds are 3.1 times high for the disagree group in comparison with strongly agree group, to be in very high intimacy relative to strongly disagree group versus strongly agree group versus strongly disagree group versus strongly agree group. Furthermore, the odds are 1.4 times high for the agree group versus strongly agree group to be in very high intimacy relative to strongly disagree versus strongly agree group.

With regard to those who need place to live as motivation for relationship, the odds are 2.3 times high for the strongly disagree group in comparison with strongly agree group, to be in very high intimacy relationship, relative to disagree group versus strongly agree group, and agree group versus strongly agree group. Furthermore, the odds are reduced by 51.1% for the disagree group versus strongly agree group, to be in very high intimacy relationship, relative to strongly disagree group versus strongly agree group, and agree group versus strongly agree group. For agree group versus strongly agree group, the odds are 1.2 times to be in very high intimacy, relative to strongly disagree group versus strongly agree group, and disagree group versus strongly agree group.

Some partners are influenced by a combination of motivation factors. The group that is influenced by the combination of place, favours and pleasure is the reference. The odds are reduced by 51.7% for partners who are influenced by either place, pleasure or favours versus place/favours/pleasure group, to be in very high intimacy relationship, relative to the partners influenced by place/favours versus place/favours/pleasure; pleasure/place versus place/favours/pleasure; and pleasure/favour versus place/favours/pleasure. For place/favours versus place/favours/pleasure, the odds are 1.1 times high for them to be in very high intimacy relationship, relative to the partners influenced by either of place, pleasure, or favours versus place/favours/pleasure; pleasure/favours versus place/favours/place; and pleasure/place versus place/favours/pleasure. Regarding pleasure/place versus place/favours/place, the odds are reduced by 46.4% for them to be in very high intimacy relative to the partners influenced by either of place, pleasure, or favours versus place/favours/pleasure; pleasure/favours versus place/favours/pleasure; and place/favours versus place/favours/pleasure; for pleasure/ favours versus place/favours/pleasure, the odds are reduced by 47.5% for them to be in very high intimacy, relative to the partners influenced by either of place, pleasure, or favours versus place/favours/pleasure; place/favours versus place/favours/pleasure; and pleasure/place versus place/favours/pleasure

The odds are 3 times high, for those whose partner's stayed away for less than 3 months to be in very high intimacy relative to those whose partners stayed way for 3 months or more but less than 6 months vs 1 year or more; 6 months or more but less than 9 vs 1 year or more; 9 months or more but less than a year vs 1 year or more. For those whose partners stayed away for 3 months or more, the odds are 2.1 times high for them to be in very high intimacy relative to the other groups; while for those whose partners stayed away for 6 months or more but less than 9, the odds are 2.1 times high for them to be in very high intimacy relative to the other groups. For those partners stayed away for 9 months or more but less than 1 year, the odds are 1.4 times high for them to be in very high intimacy relative to the other groups. A unit change in the number of children with the primary partner will increase the odds by 1.3 times for an individual to be in very high intimacy relationship. Need money variable is not statistically significant (see Table A8.2)

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Tab	le	A	3.2

Sexual Intimacy and Motivation Variables Analysis

	Test of						
		Std.	significance		- Odds	95% Confidence Interval	
Variables	В	Error	df	Sig.	Ratio	Lower	Upper
No intimacy	.439	.2961	1	.138	1.551	.868	2.771
Very low intimacy	1.352	.2941	1	.000	3.864	2.171	6.876
Low intimacy	1.686	.2940	1	.000	5.398	3.034	9.606
Moderate intimacy	4.579	.3120	1	0.000	97.420	52.855	179.562
High intimacy	4.958	.3132	1	0.000	142.291	77.023	262.867
Reasons (favours)							
Strongly disagree	1.206	.2696	1	.000	3.339	1.969	5.665
Disagree	1.130	.2489	1	.000	3.095	1.901	5.042
Agree	.336	.1842	1	.068	1.400	.976	2.009
Pleasure/Place/Favours							
Pleasure or place or favours	729	.3292	1	.027	.483	.253	.920
Place & Favours	.081	.2217	1	.715	1.084	.702	1.675
Pleasure & Place	623	.2718	1	.022	.536	.315	.914
Pleasure & Favours	645	.3096	1	.037	.525	.286	.963
Reason (Place to live)							
Strongly disagree	.815	.3102	1	.009	2.259	1.230	4.148
Disagree	.912	.3135	1	.004	2.489	1.346	4.602
Agree	.103	.2185	1	.638	1.108	.722	1.700
Partner Stayed away							
Less than 3 months	1.109	.1975	1	.000	3.031	2.058	4.465
3 months or more but less than 6	.729	.2119	1	.001	2.073	1.368	3.141
6 months or more but less than 9	.719	.2653	1	.007	2.052	1.220	3.452
9 months or more but less than 1 year	.354	.2684	1	.187	1.425	.842	2.412
Children with primary partner	.236	.0415	1	.000	1.266	1.167	1.373

Note. The source of the data is from field survey, 2014. The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis). The dependent variable is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Reference group = Very high sexual intimacy; Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print. The independent variables are need money (reference group = strongly agree); Desire favours (reference group = strongly agree) combined factors of pleasure, place to live, and favours (reference group = pleasure, favours and place to live); place to live (reference group = strongly agree); children with primary partner; and partner ever stay away (reference group = more than 1 year).

A8.3 Sexual Intimacy and sexual Performance Variables Model

There are individuals who had sex while drunk. In order to examine the chances of such individuals been in very high intimacy, the never used alcohol has been used as the reference group. The odds are reduced by 97.7% for partners who had sex while drunk versus partners who never used alcohol, to be in very high intimacy relationship relative to the partners who did not have sex while drunk versus partners who never used alcohol. Similarly, the odds are reduced by 96.3% for partners who did not have sex while drunk versus partners who never used alcohol, to be in very high intimacy relationship, relative to the partners who never used alcohol, to be in very high intimacy relationship, relative to the partners who never used alcohol, to be in very high intimacy relationship, relative to the partners who had sex while drunk versus partners who never used alcohol.

Similarly, the odds are 15.4 times high for the partners who consume Ogogoro versus partners who never used alcohol, to be in very high intimacy relationship relative to the partners who consume Burukutuu versus partners who never used alcohol, partners who consume Beer versus partners who never used alcohol, partners who consume Palm wine versus partners who never used alcohol; and partners who drink assorted drinks (others) versus partners who never used alcohol. Similarly, the odds are 6.4 times high for partners who drink Burukutuu versus partners who never used alcohol, to be in very high intimacy relationship, relative to partners who consume Ogogoro versus partners who never used alcohol, partners who drink Beer versus partners who never used alcohol, partners who drink Palm wine versus partners who never used alcohol; and partners who drink assorted drinks (others) versus partners who never used alcohol. Furthermore, the odds are 13.1times high for partners who consume Beer versus partners who never used alcohol to be in very high intimacy, relative to partners who drink Ogogoro versus partners who never used alcohol, partners who drink Burukutuu versus partners who had never used alcohol, partners who drink palm wine versus partners who never used alcohol; and partners who drink assorted drinks versus partners who never used alcohol. The odds are 31.3 times high for partners who drink Palm wine versus partners who never used alcohol be in very high intimacy, relative to partners who drink Ogogoro versus partners who never used alcohol, partners who drink Burukutuu versus partners who have never used alcohol, and partners who drink assorted drinks versus partners who never used alcohol; while the odds are 12.2 times high for partners who drink assorted drinks (others) versus partners who never used alcohol to be in

very high intimacy, relative to partners who drink Ogogoro versus partners who never used alcohol, partners who drink Burukutuu versus partners who never used alcohol, and partners who drink palm wine versus partners who have never used alcohol

Regarding the number of wives kept by the male partners, the odds are reduced by 65.3% for a unit change in the number of wives, for the individuals to be in very high intimacy relationship. Similarly, the odds are reduced by 71.9% for a unit change in the number of sexual partners, for the individual to be in very high intimacy relationship. Furthermore, the odds are 1.3 times high for change in age of sexual relationship for partners to be in very high intimacy relationship.

The reasons for not using condoms are significant in the model but it is a weak predictor relative to the other factors. The odds are 1 time high for those that don't know where to get condoms category versus others (partner don't like condoms, condoms have foul smell, condoms cause irritation), to be in very high intimacy relative to condoms are expensive versus others, condoms reduce pleasure versus others, condoms are generally scarce versus others, and would like to have children versus others. Furthermore, the odds are reduced by 7.1% for the condoms are expensive versus others, condoms reduce pleasure versus others, condoms are generally scarce versus others, would like to have children versus others; and don't know where to get condoms versus others. The odds are reduced by 40%for the condoms reduce pleasure versus others, to be in very high intimacy relative to the condoms are expensive versus others, condoms are generally scarce versus others, would like to have children versus others; and don't know where to get condoms versus others. The odds are reduced by 36.1% for condoms are generally scarce versus others, to be in very high intimacy, relative to the condoms are expensive versus others, condoms reduce pleasure versus others, and would like to have children versus others; and don't know where to get condoms versus others. While the odds are 1.1 times high for those who would like to have children versus others, to be in very high intimacy relative to the condoms are expensive versus others, condoms reduce pleasure versus others, condoms are generally scarce versus others, and don't know where to get condoms versus others (see Table A8.3).

		G (1	Test of Significance		0.11	95% Confidence Interval	
Variables	В	Std. Error	df	Sig.	Odd Ratio	Lower	Upper
No intimacy	-7.283	.5072	1	0.000	.001	.000	.002
Very low intimacy	-6.151	.4859	1	0.000	.002	.001	.006
Low intimacy	-5.790	.5085	1	0.000	.003	.001	.008
Moderate intimacy	-2.650	.4359	1	.000	.071	.030	.166
High intimacy	-2.179	.4167	1	.000	.113	.050	.256
Sex while drunk							
Yes	-3.617	.4030	1	0.000	.027	.012	.059
No	-3.448	.3524	1	0.000	.032	.016	.063
Types of Alcohol							
Ogogoro	2.889	.5431	1	.000	17.967	6.197	52.095
Burukutuu	1.979	.5154	1	.000	7.238	2.636	19.875
Beer	2.714	.3616	1	.000	15.090	7.428	30.655
Palm wine	3.566	.3951	1	0.000	35.379	16.308	76.753
Others	2.595	.8221	1	.002	13.395	2.674	67.098
Reasons for not using condoms							
Don't know where to get one	.027	.3106	1	.931	1.027	.559	1.889
Expensive	079	.4994	1	.875	.924	.347	2.460
Reduces Pleasure	502	.2060	1	.015	.605	.404	.906
Generally scarce	449	.4003	1	.261	.638	.291	1.398
Desire children	.074	.1814	1	.682	1.077	.755	1.537
Others	524	.3218	1	.104	.592	.315	1.113
Age of Relationship							
Less than 1 year	497	.2030	1	.014	.608	.409	.906
More than 1 but less than 5 years	566	.1577	1	.000	.568	.417	.773
More than 5 years							
Number of wives	-1.082	.1730	1	.000	.339	.241	.476
Number of sexual partners	-1.249	.1335	1	0.000	.287	.221	.373

Sexual Intimacy and Sexual Performance Variables Analysis

Table A8.3

Note. The source of the data is from field survey, 2014. The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis). The dependent variable is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Very high sexual intimacy(reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print. The independent variables are sex while drunk (reference group = never used alcohol); Types of alcohol consumed (reference group = never used alcohol), reasons for not using condoms (reference group = not heard or needed), Partners' number of wives; Number of sexual partners, and Age of relationship (reference group = over 5 years).

A8.4 Sexual Intimacy and HIV Variables Model

As it was in the other models, the relationships between the dependent and independent variables will be explained with the assumption that the other variables are held constant at zero except the variable of interest in relation to the dependent variable.

The odds are reduced by 3.1% for those whose partners are HIV negative versus partners who don't know their partner's status, to be in very high intimacy relationship, relative to those whose partners' are HIV negative versus partners who don't know their partner's HIV status. Similarly, for those whose partners' are HIV negative versus partners who don't know their partners' HIV status, the odds are 1.8 times high to be in very high intimacy relationship, relative to those whose partners' are HIV positive versus partners who don't know their partner's HIV status. Regarding whether several people are infected with HIV variable, the odds are reduced by 9.6% for the strongly disagree group versus strongly agree group, to be in very high intimacy relationship, relative to the disagree group versus strongly agree group, and agree group versus strongly agree group. Furthermore, odds are reduced by 58% for the disagree group versus strongly agree group, to be in very high intimacy relationship, relative to strongly disagree group versus strongly agree group, and agree group versus strongly agree group. For the agree group versus strongly agree group, the odds are reduced by 47.7% for them to be in very high intimacy relationship, relative to strongly disagree group versus strongly agree group, and disagree group versus strongly agree group. The knowledge of the main sources of the spread of HIV, 'I will feel bad if infected with HIV', and knowledge of someone who died of HIV variable are not significant in this model (see Table A8.4)

Table A8.4

Sexual Intimacy and HIV Variables Analysis

Parameter Estimates

			Test of			95% Confidence	
		Std	Significance		Odd	Interval	
Variables	В	Error	df	Sig.	Ratio	Lower	Upper
No intimacy	-1.810	.4700	1	.000	.164	.065	.411
Very low intimacy	-1.068	.4682	1	.023	.344	.137	.861
Low intimacy	789	.4676	1	.092	.454	.182	1.136
Moderate intimacy	1.514	.4735	1	.001	4.543	1.796	11.492
High intimacy	1.921	.4649	1	.000	6.828	2.745	16.983
Number living with HIV							
1	.172	.1957	1	.380	1.188	.809	1.743
2	.081	.1872	1	.667	1.084	.751	1.564
Main source of infection							
Unprotected casual sex	403	.4407	1	.361	.668	.282	1.586
Blood transfusion	663	.4839	1	.171	.515	.200	1.330
Sharing Needles or Syringes	463	.5216	1	.375	.629	.226	1.749
Others	692	.4617	1	.134	.501	.203	1.238
Partner's HIV status							
Positive	032	.5622	1	.955	.969	.322	2.915
Negative	.607	.1611	1	.000	1.836	1.339	2.517
Will feel bad if infected							
Strongly disagree	.061	.3721	1	.869	1.063	.513	2.205
Disagree	150	.5068	1	.767	.860	.319	2.323
Agree	077	.1743	1	.658	.926	.658	1.303
Several people are infected							
Strongly disagree	101	1.1855	1	.932	.904	.089	9.232
Disagree	868	.3842	1	.024	.420	.198	.891
Agree	648	.1716	1	.000	.523	.374	.732

Note. The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. The dependent variable is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print. The independent variables are known Number of individuals who have died of HIV (reference group = 3), Main sources of spread of HIV (reference group =don't know); Feel bad if infected with HIV (reference group =
strongly agree); Partners HIV status (reference group = don't know), and several People are infected with HIV (reference group = strongly agree).

A8.5 Sexual Intimacy and the entire Independents Variable Model

A unit change in the number of sexual partners will reduce the odds by 74.6% for the partners to be in very high intimacy relationship. Similarly, a unit change in the number of wives will reduce the odds by 62% for the partners to be in very high intimacy relationship. Furthermore, the odds are 3.4 times high for partners who stayed away from primary partners for less than three months versus those who stayed for over 1 year, to be in very high intimacy, relative to those who stayed away for more than three months but less the six versus those who stayed for over 1 year; those who stayed for six months or more but less than nine months; and those who stayed for nine months or more but less than 1 year. The odds are 2.4 times high for those who stayed away for three months or more but less than six versus those who stayed for over 1 year, to be in very high intimacy, relative to partners who stayed away from primary partners for less than three months versus those who stayed away for over 1 year, those who stayed for six months or more but less than nine months versus those who stayed away for over 1 year; and those who stayed for nine months or more but less than 1 year. Similarly, the odds are 1.9 times high for those who stayed away for six months or more, but less than nine months versus those who stayed away for over 1 year, to be in very high intimacy relative to partners who stayed away for less than three months versus those who stayed away for over 1 year; those who stayed away for more than three months but less than six versus those who stayed away for over 1 year; and those who stayed for nine months or more but less than 1 year versus those stayed away for over 1 year. While the odds are 1.7 times high for those who stayed away for more than nine months but less than 1 year versus those who stayed for over 1 year, to be in very high intimacy relative to those who stayed away from primary partners for less than three months versus those who stayed away for over 1 year; and those who stayed for six months or more but less than nine months.; and those stayed away for three months or more but less than six versus those who stayed away for over 1 year.

Regarding favours as motivation for relationship, the odds are approximately 3 times high for the strongly disagree group versus strongly agree group, to be in very high intimacy relationship, relative to disagree group versus strongly agree group; and agree group versus strongly agree group. For the disagree group versus strongly agree group, the odds are 2.5 times high, to be in very high intimacy relationship, relative to disagree group versus strongly agree group, agree group versus strongly agree group; and the strongly disagree group versus strongly agree group, while for the agree group versus strongly agree group, the odds are 1.8 times high to be in very high intimacy relationship, relative to disagree group versus strongly agree group; and strongly disagree group versus strongly agree group, With regard to alcohol type, the odds are 23.1 times high for the partners who consume Ogogoro versus partners who never used alcohol to be in very high intimacy relationship, relative to partners who drink Burukutuu versus partners who never used alcohol; partners who drink Beer versus partners who never used alcohol, partners who drink Palm wine versus partners who never used alcohol; and partners who consume assorted drinks (others) versus partners never used alcohol. For the partners who drink Burukutuu versus partners who never used alcohol, the odds are 9.6 times high to be in very high intimacy relationship, relative to partners who drink Beer versus partners who never used alcohol, partners who drink Palm wine versus partners who never used alcohol, partners who consume assorted drinks (others) versus partners who never used alcohol; and partners who consume Ogogoro versus partners who never used alcohol. For partners who drink Beer versus partners who never used alcohol, the odds are 17.8 times high to be in very high intimacy relationship, relative to partners who drink Palm wine versus partners who never used alcohol; partners who consume assorted drinks (others) versus partners never used alcohol, partners who consume Ogogoro versus partners who never used alcohol; and partners who drink Burukutuu versus partners who never used alcohol. For partners who drink Palm wine versus partners who never used alcohol, the odds are 44.4 times high to be in very high intimacy relationship, relative to partners who consume assorted drinks (others) versus partners never used alcohol, partners who consume Ogogoro versus partners who never used alcohol, partners who drink Burukutuu versus partners who never used alcohol; and partners who drink Beer versus partners who never used alcohol. While partners who consume assorted drinks (others) versus never used alcohol, the odds are 23.9 times high to be in very high intimacy relationship, relative to partners who consume Ogogoro versus partners who never used alcohol, partners who drink Burukutuu versus partners who never used alcohol, partners who drink Beer versus partners who never used alcohol; and partners who consume Palm wine versus partners who never used alcohol.

The odds are reduced by 51.1% for partners who are not satisfied with relationship versus partners who are highly satisfied, to be in very high intimacy relationship, relative to partners who are somewhat satisfied versus partners who are highly satisfied; and partners who are satisfied versus partners who are highly satisfied. For partners who are somewhat satisfied versus partners who are highly satisfied, the odds are reduced by 38.7% for them to be in very high intimacy relationship, relative to partners who are satisfied versus partners who are highly satisfied, and partners who are not satisfied versus partners who are highly satisfied; for partners who are satisfied versus highly satisfied, the odds are 1 time high, to be in very high intimacy relationship, relative to partners who are not satisfied versus partners who are highly satisfied, and partners who are somewhat satisfied versus partners who are highly satisfied. Similarly, the odds are 1.2 times high for positive HIV status (partners) versus partners who don't know their partners' HIV status, to be in very high intimacy, relative partners who are HIV negative versus partners who don't know their partners HIV status. For partners who are HIV negative versus partners who don't know their partners HIV status, the odds are 2.5 times high to be in very high intimacy, relative to partners who are HIV positive versus partners who don't know their partners HIV status (see Table A8.5).

Table A8.5

			Test of Significance			95% Confidence Interval	
Variables	р	Std.	JE	Sin	Odd	Lanuar	Llanan
Variables	В	Error	dī	51g.	Ratio	Lower	Opper 027
Very low intimacy	-4.034	.0107	1	.000	.008	.002	.027
Low intimacy	-3.031	.0081	1	.000	.020	.008	.007
Moderate intimacy	-5.240	.0271	1	.000	.059	.011	.154
High intimacy	.034 564	.3932	1	.920	1.050	.329	5 394
Types of family support	.504	.5725	1	.525	1.757	.572	5.574
Money	077	1.650		640	0.04		1 000
Matarial	077	.1659		.643	.926	.669	1.282
Material	.265	.2038	1	.193	1.304	.874	1.944
Money & Material	645	.3103	1	.038	.525	.286	.964
Reasons (favours)							
Strongly disagree	1.104	.3033	1	.000	3.016	1.664	5.465
Disagree	.965	.3016	1	.001	2.625	1.453	4.740
Agree	.606	.2825	1	.032	1.834	1.054	3.190
Partner's HIV status							
Positive	.252	.1909	1	.187	1.287	.885	1.871
Negative	.918	.1774	1	.000	2.505	1.770	3.547
Sex while drunk							
Yes	-3.725	.4162	1	0.000	.024	.011	.055
No	-3.553	.3584	1	0.000	.029	.014	.058
Types of Alcohol							
Ogogoro	3.143	.5727	1	.000	23.168	7.541	71.179
Burukutuu	2.261	.5347	1	.000	9.589	3.362	27.347
Beer	2.882	.3815	1	.000	17.846	8.448	37.697
Palm wine	3.794	.4367	1	0.000	44.446	18.886	104.598
Others	3.173	.7934	1	.000	23.879	5.043	113.073
Satisfaction with relationship							
Not satisfied	716	.3196	1	.025	.489	.261	.915
Somewhat satisfied	489	.2511	1	.051	.613	.375	1.003
Satisfied	.034	.1854	1	.854	1.035	.719	1.488
Partner stayed away							
Less than 3 months	1.238	.3090	1	.000	3.449	1.882	6.320
3 months or more but less than 6	.890	.3330	1	.008	2.434	1.267	4.675
6 months or more but less than 9	.677	.3951	1	.087	1.968	.907	4.268
9 months or more but less than 1	509	3837	1	184	1 664	785	3 527
year	.509	.3032		.104	1.004	.105	5.521
Number of Wines	-1.369	.1392	1	0.000	.254	.194	.334
INUMBER OF WIVES	967	.1711	1	.000	.380	.272	.532

Note. The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. The dependent variable is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print. The independent variables are Relationship status (reference group = married); Family types (reference group = others); Types of family support (reference group= no support); Desire favours (reference group= strongly agree); Partner's HIV status (reference group = don't know); Sex while drunk (reference group = never used alcohol); Types of alcohol(reference group = never used alcohol); Satisfaction with primary relationship (reference group = highly satisfied); Partners number of wives; Number of sexual partners; Partner ever stay away (reference group = 1 year or more).

A8.6 Sexual webs HIV Status and Sexual Intimacy Model

The odds are reduced by 91.3% for partners who are at the level of no intimacy relationship versus very high intimacy, to be in the group of both HIV positive versus both HIV negative, relative to very low intimacy versus very high intimacy, low intimacy versus very high intimacy, moderate intimacy versus very high intimacy, and high intimacy versus very high intimacy; For partners who are in very low intimacy versus very high intimacy, the odds are reduced by 94.4% for them to be in the group of both HIV positive versus both HIV negative, relative to low intimacy versus very high intimacy, moderate intimacy versus very high intimacy, no intimacy versus very high intimacy, and high intimacy versus very high intimacy. For partners who are in low intimacy versus very high intimacy, the odds are reduced by 94.7% for them to be in the group of both HIV positive versus both HIV negative, relative to moderate intimacy versus very high intimacy, no intimacy versus very high intimacy, high intimacy versus very high intimacy; and very low intimacy versus very high intimacy. For partners who are in moderate intimacy versus very high intimacy, the odds are reduced by 94.7% for them to be in the group of both HIV positive versus both HIV negative, relative to no intimacy versus very high intimacy, very low intimacy versus very high intimacy, low intimacy versus very high intimacy, and high intimacy versus very high intimacy; and for high intimacy versus very high intimacy, the odds are reduced by 90% for them to be in the group of both HIV positive versus both HIV negative, relative to no

intimacy versus very high intimacy, very low intimacy versus very high intimacy, low intimacy versus very high intimacy, moderate intimacy versus very high intimacy (see Table A8.6).

Table A8.6

Sexual Webs HIV Status and Sexual Intimacy Analys	is
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		Std	Test of significan	ce	- Odd	95% Confidence Interval		
	В	Error	Df	Sig.	Ratio	Lower	Upper	
Both positive	-3.421	.3405	1	0.000	.033	.017	.064	
Positive/negative	-2.956	.3377	1	0.000	.052	.027	.101	
Positive/ don't know	-2.614	.3346	1	.000	.073	.038	.141	
Negative/don't know	-1.863	.3268	1	.000	.155	.082	.294	
Sexual intimacy								
No intimacy	-2.445	.3448	1	.000	.087	.044	.170	
Very low intimacy	-2.889	.3527	1	.000	.056	.028	.111	
Low intimacy	-2.928	.3785	1	.000	.053	.025	.112	
Moderate intimacy	-2.835	.3412	1	.000	.059	.030	.115	
High intimacy	-2.303	.3315	1	.000	.100	.052	.191	

Note. The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis). The dependent variable is sexual webs HIV status: Both positive; Positive/ negative; Positive/don't know partner's status; Negative/ don't know partner's status; Both negative (reference group). The independent variable is sexual intimacy: No sexual intimacy; Very low sexual intimacy; Low sexual intimacy; Moderate sexual intimacy; High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Significant values = less or equal to 0.05 are in bold print

Table A8.7

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Parameter B Std. Error Lower Upper Square off Sig. Eprophy Lower Upper Threshold [Seinitimacy1 2.020 0.031 -2.763 2.477 128.266 1 0.000 0.071 0.083 0.084 [Seinitimacy1 1.403 0.455 1.134 1.141 0.144 1 0.000 2.267 2.269 [Seinitimacy1 1.403 0.455 1.134 1.92 9.1464 1 0.000 4.055 0.779 4.445 [Seinitimacy1 1.403 0.740 2.583 6.888 1.6139 1 0.000 1.75 0.66 4.079 1.000 1.75 0.36 4.033 1.479 1.445 1 0.000 1.75 0.35 5.361.Typeak.Tamtyp1 344 6.85 1.812 1.046 1.322 1.033 3.82 1.179 1.044 1.33 3.35 3.134 1.146 1.322 1.67 1.434 1.141 1.133 <th></th> <th></th> <th></th> <th></th> <th>Inte</th> <th>rval</th> <th>H</th> <th>ypothesis Te</th> <th>est</th> <th></th> <th>Interval f</th> <th>or Exp(B)</th>					Inte	rval	H	ypothesis Te	est		Interval f	or Exp(B)
parametry B B det error Upper Squar off Sig. Ep(p) Lower Upper [Seinitinacy3 0.730 0.56 -1.833 -1.627 108.039 -1 0.000 0.77 10.00 10.97 [Seinitinacy3 0.403 0.055 -1.442 91.144 91.144 0.000 4.066 2.75 0.444 [Seinitinacy4 0.470 0.769 -0.75 0.714 1.462 91.464 0.000 4.006 0.790 0.718 0.6794 Sall Typeak-Farryp1 -1.476 0.479 -2.53 -8.88 16.329 -1<000							Wald Chi-					
Threshold [Seathmacy2 -2.400 -0.473 0.400 0.000 0.000 0.001 0.000 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.000 0.001 0.000	Parameter		В	Std. Error	Lower	Upper	Square	df	Sig.	Exp(B)	Lower	Upper
[Seathmacy3 1.730 0.053 -1.833 -1.627 1000.399 1 0.000 1.77 1.00 0.25 2.69 [Seathmacy4] 1.403 0.015 1.314 1.412 951.464 1 0.000 4.066 3.719 4.445 [Seathmacy4] 1.776 0.714 1.636 1.916 619.46 1 0.000 4.06 3.719 4.445 Sacll Typeak Famryp1 -1.488 2.22 2.511 -4.66 8.126 1 0.000 2.05 0.63 Sacll Typeak Famryp1 -3.48 1.485 1.126 1.046 1.032 5.17 2.84 0.003 2.051 2.84 1.046 1.033 3.04 3.043 1.441 1.143 3.045 1.147 1.033 3.04 1.047 1.046 3.03 1.53 3.041 1.044 1.040 1.043 3.027 7.88 3.027 7.89 3.027 7.89 3.027 7.89 3.027 1.033 3.027	Threshold	[Sexintimacy1	-2.620	.0731	-2.763	-2.477	1283.266	1	0.000	.073	.063	.084
		[Sexintimacy2	-1.730	.0526	-1.833	-1.627	1080.839	1	0.000	.177	.160	.197
[Sexintimacy5] 1.403 0.405 1.314 1.402 951.464 1 0.000 4.666 3.719 4.445 Sacl1 Typeakl-Fantyp1 1.4740 .499 2.583 8.888 6.138 1.000 1.75 0.76 6.794 Sacl1 Typeakl-Fantyp1 1.488 .521 -2.511 .465 8.812 1.004 2.02 0.81 .628 Sacl1 Typeakl-Fantyp1 .934 .4685 1.822 0.016 3.077 1.046 339 1.79 .488 .4623 1.032 5.17 2.284 .4623 1.032 5.17 2.84 .4433 .4463 1.045 .473 .438 SaclTypeacl-Fantyp1 .513 .433 .428 .588 .144 1 .007 .423 .227 .788 SaclTypeacl-Fantyp1 .577 .069 .438 .588 .144 1 .007 .423 .227 .788 SaclTypeacl-Fantyp2 .1433 .2107 .788 .588		[Sexintimacy3	-1.403	.0455	-1.492	-1.314	951.464	1	0.000	.246	.225	.269
[Sexintimacy] 1.776 .0.714 1.636 1.916 619.646 1 0.000 5.007 5.136 6.749 Sacll Typealcl Fantypl. 1.1488 5.221 2.511 6.465 8.125 1 0.000 2.25 0.638 Sacll Typealcr Fantypl. 1.1487 2.076 1.743 9.930 41.455 1 0.000 2.66 3.395 Sacll Typealcr Fantypl .0.659 3.077 1.046 3.071 1.046 3.39 1.079 3.842 SaclTypealcr Fantypl .6.59 3.075 1.474 1.225 2.884 1 0.007 4.23 1.77 3.83 SaclTypealcr Fantypl .6.59 3.336 1.828 5.58 1.46 1 7.03 3.67 1.747 SaclTypealcr Fantypl .6.57 0.775 0.750 4.405 1.017 1.000 2.41 1.742 SaclTypealcr Fantypl .1.432 2.374 1.402 4.604 0.000 1.39 0.77		[Sexintimacy4	1.403	.0455	1.314	1.492	951.464	1	0.000	4.066	3.719	4.445
Sach Typealc. Fantyp1. 1.740 4.299 -2.583		[Sexintimacy5	1.776	.0714	1.636	1.916	619.646	1	0.000	5.907	5.136	6.794
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Sacl Typeal+Fantyp1	[Sacl1.Type	ealc3Famtyp1	-1.337	.2076	-1.743	930	41.459	1	.000	.263	.175	.395
[Sacl1Typealc1Famtyp1] 659	Sacl1.Type	al4.Famtyp1	934	.4685	-1.852	016	3.977	1	.046	.393	.157	.984
Sacl2Typealc1Famtyp1 513 4239 318 1.444 1.464 1 226 1.670 7.728 3.833 Sacl2Typealc2Famtyp1 811 .4776 -1.747 1.125 2.884 1.089 .444 1.113 Sacl2Typealc4Famtyp1 959 3.173 1.481 .238 7.336 1 .007 4.23 2.27 .789 Sacl2Typealc4Famtyp1 155 3.536 .5.28 .001 1 .973 1.050 .0.64 17.329 SaclTypealc4Famtyp1	[Sacl1Type	alc5Famtyp1	659	.3067	-1.260	058	4.623	1	.032	.517	.284	.943
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Sacl2Typealc3Fantyp1	Sacl2Typea	alc2Famtyp1	811	.4776	-1.747	.125	2.884	1	.089	.444	.174	1.133
Sacl2Typealc4Fantyp1 135	Sacl2Typea	alc3Famtyp1	859	.3173	-1.481	238	7.336	1	.007	.423	.227	.789
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Sacl3TypealcFamtyp1 577 0.0879 405 43.175 1 0.000 5.61 473 6.677 SaclTypealcFamtyp2 1.1421 33245 2.057 785 19.170 1 0.000 2.421 1.128 4.456 SaclTypealcFamtyp2 1.972 2.060 2.2541 -1.402 46.046 1 0.000 2.39 1.157 3.62 SaclTypealcFamtyp2 1.433 2.129 2.2644 -1.476 47.716 1 0.000 0.127 0.701 2.29 SaclTypealcFamtyp2 1.866 3.856 2.252 1.050 21.935 1 0.000 1.64 0.777 2.546 SaclTypealcFamtyp2 1.866 3.041 1.964 772 20.241 1 0.000 3.11 1.65 588 SaclTypealcFamtyp2 1.168 3.041 1.464 .522 1.255 1 0.000 3.011 .665 .688 SaclTypealcFamtyp2 1.168 .3445 1.844 .522 1.255 .1 0.000 .000 .001 .	Sacl2Typea	alc5Famtyp1	.049	1.4305	-2.755	2.852	.001	1	.973	1.050	.064	17.329
SaclTypealc1Famtyp2 1.421 3.245 -2.057 .7.85 19.170 1 0.000 2.42 .1.28 .4.456 SaclTypealc2Famtyp2 -1.433 2.129 -1.830 -1.015 45.270 1 0.000 1.39 0.079 2.466 SaclTypealc3Famtyp2 -1.433 2.129 -1.830 -1.015 45.270 1 0.000 1.39 0.071 2.293 SaclTypealc3Famtyp2 -1.806 3856 -2.562 -1.050 21.375 1.000 1.16 0.000 1.17 0.011 2.293 SaclTypealc3Famtyp2 -1.816 3856 -2.562 -1.050 21.393 1.000 1.64 0.077 3.50 SaclTypealc4Famtyp2 -1.866 3.041 -1.964 -7.72 2.0241 1 0.000 2.155 1.40 4.62 SaclTypealc4Famtyp2 -1.168 3.345 1.404 -5.32 1.255 1 0.000 2.000 1.010 2.002 1.58 SaclTypealc4Famtyp2 -1.168 -1.044 -2.502 1.147 115.32 0.000	Sacl3Typea	alc6Famtyp1	577	.0879	750	405	43.175	1	.000	.561	.473	.667
Sacl1Typealc2Fantyp2 -1.972	Sacl1Typea	alc1Famtyp2	-1.421	.3245	-2.057	785	19.170	1	.000	.242	.128	.456
Sacl1Typealc3Fantyp2 1.4.33	Sacl1Typea	alc2Famtyp2	-1.972	.2906	-2.541	-1.402	46.046	1	.000	.139	.079	.246
Sacl1Typealc4Fantyp2 -2.060	Sacl1Typea	alc3Famtyp2	-1.433	.2129	-1.850	-1.015	45.270	1	.000	.239	.157	.362
Sacl1 Typealc5Fantyp2 -1.806	Sacl1Typea	alc4Famtyp2	-2.060	.2982	-2.644	-1.476	47.716	1	.000	.127	.071	.229
Sacl2Typealc1Famtyp2 812 .8913 -2.559 .935 .831 1 362 .444 .077 2.546 Sacl2Typealc2Famtyp2 -1.846 .4079 -2.646 -1.047 20.490 1 .000 .158 .071 .351 Sacl2Typealc3Famtyp2 -1.368 .3041 -1.964 772 20.241 1 .000 .255 .140 .462 Sacl2Typealc4Famtyp2 -1.168 .3245 -1.804 532 12.953 1 .000 .311 .165 .588 Sacl2Typealc4Famtyp2 -1.044 .7441 -2.502 .415 1.967 1 .161 .352 .0.82 .1.54 [Sacl2Typealc4Famtyp2 -1.566 .0469 -1.658 .1.474 1115.325 1 .0.000 .0.00 .0.00 .2.99 .3.63 .565 Sacl3Typealc4Famtyp3 -2.077 1.3042 -6.681 91.053 .1 .0.00 .0.00 .0.00 .0.00 .5.65	Sacl1Typea	alc5Famtyp2	-1.806	.3856	-2.562	-1.050	21.935	1	.000	.164	.077	.350
Sacl2Typealc2Famtyp2 -1.846 .4079 -2.646 -1.047 20.490 1 .000 .158 .0.01 .3.51 Sacl2Typealc3Famtyp2 -1.368 041 -1.964 772 20.241 1 .000 .255 .1.40 .462 Sacl2Typealc4Famtyp2 -1.168 3245 -1.804 532 12.953 1 .000 .311 .1.65 .588 Sacl2Typealc4Famtyp2 -1.044 .7441 -2.502 .415 1.967 1 .161 .352 .082 1.514 [Sacl3Typealc6Famtyp2 566 .0469 -1.658 .1.474 1115.325 1 0.000 .000 <td>Sacl2Typea</td> <td>alc1Famtyp2</td> <td>812</td> <td>.8913</td> <td>-2.559</td> <td>.935</td> <td>.831</td> <td>1</td> <td>.362</td> <td>.444</td> <td>.077</td> <td>2.546</td>	Sacl2Typea	alc1Famtyp2	812	.8913	-2.559	.935	.831	1	.362	.444	.077	2.546
Sacl2Typealc3Famtyp2 1.368	Sacl2Typea	alc2Famtyp2	-1.846	.4079	-2.646	-1.047	20.490	1	.000	.158	.071	.351
Sacl2Typealc4Famtyp2 -1.168	Sacl2Typea	alc3Famtyp2	-1.368	.3041	-1.964	772	20.241	1	.000	.255	.140	.462
Sacl2Typealc5Famtyp2 -1.044 .7441 -2.502 .415 1.967 1 1.61 352 .082 1.514 [Sacl2Typealc6Famtyp2 1.566 .0469 -1.658 .1.474 1115.325 1 0.000 2.09 .190 .229 Sacl3Typealc3Famtyp2 3.767E+00 - 1 0.000 1.000 0.000 0.000 Sacl1Typealc1Famtyp3 -2.077 1.3042 -4.633 .479 2.536 1 1.11 1.25 .010 1.615 Sacl1Typealc2Famtyp3 -1.097 1.5648 4.164 1.970 .492 1 .483 .334 .016 7.168 Sacl1Typealc2Famtyp3 -1.523 .4856 -2.474 .571 9.830 1 .002 .218 .084 .565 Sacl1Typealc4Famtyp3 3.767E+00 - 1 0.000 1.000 0.000 .0000 .0000 Sacl1Typealc1Famtyp3 2.651 1.1105 4.827 474 5.699 1 .017 .071 .008 .622 Sacl2Typealc4Famtyp3	Sacl2Typea	alc4Famtyp2	-1.168	.3245	-1.804	532	12.953	1	.000	.311	.165	.588
[Sacl2Typealc6Famtyp2 -1.566 .0469 -1.658 -1.474 1115.325 1 0.000 209 .190 .229 Sacl3Typealc3Famtyp2 3.767E+00 - - 1 0.000 1.000 0.000 0.000 Sacl3Typealc6Famtyp2 857 .0898 -1.032 681 91.053 1 0.000 4.25 .356 .506 Sacl1Typealc1Famtyp3 -2.077 1.3042 4.633 .479 2.536 1 1.111 .125 .010 1.615 Sacl1Typealc2Famtyp3 -1.097 1.5648 4.164 1.970 .492 1 .483 .334 .016 7.168 Sacl1Typealc2Famtyp3 -1.523 .4856 -2.474 571 9.830 1 .002 .218 .084 .565 Sacl1Typealc4Famtyp3 3.767E+00 1 10000 1.000 0.000 0.000 Sacl1Typealc4Famtyp3 2.651 1.1105 4.827 474 5.699 1	Sacl2Typea	alc5Famtyp2	-1.044	.7441	-2.502	.415	1.967	1	.161	.352	.082	1.514
Sacl3Typealc3Famtyp2 3.767E+00 Image: constraint of the symbol in t	[Sacl2Type	alc6Famtyp2	-1.566	.0469	-1.658	-1.474	1115.325	1	0.000	.209	.190	.229
Sacl3Typealc6Famtyp2 857 .0898 -1.032 681 91.053 1 0.000 .425 .356 .506 Sacl1Typealc1Famtyp3 -2.077 1.3042 .4.633 .479 2.536 1 1.111 1.125 .010 1.615 Sacl1Typealc2Famtyp3 -1.097 1.5648 .4.164 1.970 .492 1 .483 .334 .016 7.168 Sacl1Typealc3Famtyp3 -1.523 .4856 .2.474 571 9.830 1 .002 .218 .084 .565 Sacl1Typealc4Famtyp3 3.767E+00 .4827 474 5.699 1 0.017 .010 0.000 0.000 0.000 Sacl2Typealc1Famtyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 1.114 .101 .127 Sacl2Typealc3Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 2.005 1.225 .003 4.655 Sacl2Typealc4Famtyp3 -1.266 .758 -2.753 .221 2.785 1 <td>Sacl3Typea</td> <td>alc3Famtyp2</td> <td>3.767E+00</td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>0.000</td> <td>1.000</td> <td>0.000</td> <td>0.000</td>	Sacl3Typea	alc3Famtyp2	3.767E+00					1	0.000	1.000	0.000	0.000
Sacl1Typealc1Famtyp3 -2.077 1.3042 4.633 .479 2.536 1 1.111 1.125 .010 1.615 Sacl1Typealc2Famtyp3 -1.097 1.5648 4.164 1.970 .492 1 4.83 .334 .016 7.168 Sacl1Typealc3Famtyp3 -1.523 .4856 -2.474 571 9.830 1 .002 .218 .084 .565 Sacl1Typealc4Famtyp3 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl1Typealc4Famtyp3 -2.651 1.1105 4.827 474 5.699 1 .017 .071 .008 .622 Sacl2Typealc1Famtyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 1.114 .101 .127 Sacl2Typealc2Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 2.09 .203 4.655 Sacl2Typealc3Famtyp3 -1.266 .758 -2.753 .221 2.785 1 .095 2.82 .064 1.247	Sacl3Typea	alc6Famtyp2	857	.0898	-1.032	681	91.053	1	0.000	.425	.356	.506
Sacl1Typealc2Famtyp3 -1.097 1.5648 4.164 1.970 .492 1 .483 .334 .016 7.168 Sacl1Typealc3Famtyp3 -1.523 .4856 -2.474 571 9.830 1 .002 .218 .084 .565 Sacl1Typealc4Famtyp3 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl1Typealc4Famtyp3 -2.651 1.1105 4.827 474 5.699 1 .017 .071 .008 .622 Sacl2Typealc1[Famtyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 1.110 .127 Sacl2Typealc2Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Famtyp3 -1.266 .7588 -2.753 .221 2.785 1 .095 282 .064 1.247 Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 .179 .515 .196 1.356 Sac	Sacl1Typea	alc1Famtyp3	-2.077	1.3042	-4.633	.479	2.536	1	.111	.125	.010	1.615
Sacl1Typealc3Fantyp3 -1.523 .4856 -2.474 571 9.830 1 .002 2.18 .084 .565 Sacl1Typealc4Fantyp3 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl1Typealc4Fantyp3 -2.651 1.1105 4.827 474 5.699 1 .017 .011 .008 .622 Sacl2Typealc1[Fantyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 1.110 .127 Sacl2Typealc2Fantyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Fantyp3 -1.266 .7588 -2.753 .221 2.785 1 .095 282 .064 1.247 Sacl2Typealc4Fantyp3 663 .4934 -1.630 .304 1.804 1 .179 .515 .196 1.356 Sacl3Typealc6Fantyp3 947 .3097 -1.554 340 9.348 1 .002 .388 .211 .712 Sacl	Sacl1Typea	alc2Famtyp3	-1.097	1.5648	-4.164	1.970	.492	1	.483	.334	.016	7.168
Sacl1Typealc4Fantyp3 3.767E+00 0 0 0.000 0.000 0.000 Sacl1Typealc5Fantyp3 -2.651 1.1105 -4.827 474 5.699 1 0.017 0.01 0.000 0.000 Sacl2Typealc1Fantyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 1.114 1.01 1.127 Sacl2Typealc1Fantyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Fantyp3 -2.066 .7588 -2.753 .221 2.785 1 .095 282 .064 1.247 Sacl2Typealc4Fantyp3 663 .4934 -1.630 .304 1.804 1 .179 .515 .196 1.356 Sacl3Typealc6Fantyp3 947 .3097 -1.554 340 9.348 1 .002 .388 .211 .712 Sacl1TypealcFantyp4 3.767E+00 1 0.000 0.000 0.000 Sacl2Typealc4Fantyp4. .0*	Sacl1Typea	alc3Famtyp3	-1.523	.4856	-2.474	571	9.830	1	.002	.218	.084	.565
Sacl1Typealc5Famtyp3 -2.651 1.1105 -4.827 474 5.699 1 .017 .071 .008 .622 Sacl2Typealc1[Famtyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 .114 .101 .127 Sacl2Typealc1[Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Famtyp3 -1.266 .7588 -2.753 .221 2.785 1 .095 282 .064 1.247 Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 .179 .515 .196 1.356 Sacl3Typealc6Famtyp3 947 .3097 -1.554 340 9.348 1 .002 .388 .211 .712 Sacl1TypealcFamtyp4 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4. .64 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4.	Sacl1Typea	lc4Famtyp3	3.767E+00					1	0.000	1.000	0.000	0.000
Sacl2Typealc1[Famtyp3 -2.175 .0576 -2.288 -2.062 1423.699 1 0.000 .114 .101 .127 Sacl2Typealc2Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Famtyp3 -1.266 .7588 -2.753 .221 2.785 1 0.995 2.82 .064 1.247 Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 1.79 5.15 .196 1.356 Sacl3Typealc6Famtyp3 947 .3097 -1.554 340 9.348 1 .002 3.88 .211 .712 SaclTypealcFamtyp4 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4. .0* 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4. .0* 1 0.0 1 0.000 0.000	Sacl1Typea	alc5Famtyp3	-2.651	1.1105	-4.827	474	5.699	1	.017	.071	.008	.622
Sacl2Typealc2Famtyp3 -2.077 1.8443 -5.692 1.538 1.268 1 260 .125 .003 4.655 Sacl2Typealc3Famtyp3 -1.266 .7588 -2.753 .221 2.785 1 .095 2.82 .064 1.247 Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 1.79 5.15 .196 1.356 Sacl3Typealc6Famtyp3 947 .3097 -1.554 340 9.348 1 .002 .388 .211 .712 Sacl2Typealc4Famtyp4 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4. .0* 1 0.000 1.000 0.000 0.000	Sacl2Typea	alc1[Famtyp3	-2.175	.0576	-2.288	-2.062	1423.699	1	0.000	.114	.101	.127
Sacl2Typealc3Famtyp3 -1.266 .7588 -2.753 .221 2.785 1 .095 282 .064 1.247 Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 1.79 5.15 .196 1.356 Sacl3Typealc6Famtyp3 947 .3097 -1.554 340 9.348 1 .002 388 .211 .712 Sacl1TypealcFamtyp4 3.767E+00 1 0.000 1.000 0.000 0.000 Sacl2Typealc4Famtyp4. .0* 1 0.000 1.000 0.000 0.000 0.000	Sacl2Typea	alc2Famtyp3	-2.077	1.8443	-5.692	1.538	1.268	1	.260	.125	.003	4.655
Sacl2Typealc4Famtyp3 663 .4934 -1.630 .304 1.804 1 1.79 5.15 .196 1.356 Sacl3Typealc6Famtyp3 947 .3097 -1.554 340 9.348 1 .002 388 .211 .712 Sacl1TypealcFamtyp4 3.767E+00 1 0.000 1.000 0.000	Sacl2Typea	alc3Famtyp3	-1.266	.7588	-2.753	.221	2.785	1	.095	.282	.064	1.247
Sacl3Typealc6Famtyp3 947 .3097 1.554 340 9.348 1 .002 388 .211 .712 Sacl1TypealcFamtyp4 3.767E+00 1 0.000 1.000 0.000	Sacl2Typea	lc4Famtyp3	663	.4934	-1.630	.304	1.804	1	.179	.515	.196	1.356
Sacl1TypealcFamtyp4 3.767E+00 1 0.000 <td>Sacl3Typea</td> <td>alc6Famtyp3</td> <td>947</td> <td>.3097</td> <td>-1.554</td> <td>340</td> <td>9.348</td> <td>1</td> <td>.002</td> <td>.388</td> <td>.211</td> <td>.712</td>	Sacl3Typea	alc6Famtyp3	947	.3097	-1.554	340	9.348	1	.002	.388	.211	.712
Sacl2Typealc4Famtyp4. 0 ⁴	Sacl1Typea	alcFamtyp4	3.767E+00					1	0.000	1.000	0.000	0.000
	Sacl2Typea	alc4Famtyp4.	0ª							1		
(Scale) 1 ^b	(Scale)	-	1 ^b									

Interaction between Sex while Drunk and Types of Alcohol Nested in Types of family Model

Note: The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. The dependent variable is sexual intimacy. Sexintimacy1= No sexual intimacy; Sexintimacy2 = Very low sexual intimacy; Sexintimacy3 =Low sexual intimacy; Sexintimacy4 = Moderate sexual intimacy; Sexintimacy5 = High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Exp (B) = exponential B. The values of B, and Significant values less or equal to 0.05 are in bold print. The 0a = reference group. The independent variables are Family types, Sex while drunk and Types of alcohol; Famtyp1 = monogamous (family types); Famtyp2 =polygamous; Famtyp3 =single; Famtype4 =others (reference group).Sexacl1 = yes (sex while drunk); Sexacl2 = no; Sexacl3 = never used alcohol (reference group). Typeacl1= Ogogoro; Typeacl2 = Burukutuu; Typeacl3 = Beer; Typeacl4 =Palm wine; Typeacl5 = others; Typeacl6 = never used alcohol;

Table A8.8

				I	Parameter F	stimates					
	Ī	· · · · · · · · · · · · · · · · · · ·		Inte	rval	Ну	pothesis Te	est		Interval for H	
Parameter		В	Std. Error	Lower	Upper	Wald Chi- Square	df	Sig.	Exp(B)	Lower	Upper
Threshold	Sexintimacy1	-2.663	.0728	-2.806	-2.521	1337.137	1	0.000	.070	.060	.080
	Sexintimacy2	-1.760	.0530	-1.864	-1.656	1103.908	1	0.000	.172	.155	.191
	Sexintimacy3	-1.428	.0457	-1.517	-1.338	976.919	1	0.000	.240	.219	.262
l	Sexintimacy4	1.428	.0457	1.338	1.517	976.919	1	0.000	4.170	3.813	4.560
	Sexintimacy5	1.806	.0708	1.667	1.945	651.267	1	0.000	6.085	5.297	6.990
[Satisrelatn	1Famtyp1.	-1.755	.2357	-2.217	-1.293	55.410	1	.000	.173	.109	.275
Satis relatn?	2[Famtyp1	-1.891	.1808	-2.245	-1.537	109.428	1	0.000	.151	.106	.215
Satis relatn?	3Famtyp1	560	.0932	742	377	36.105	1	.000	.571	.476	.686
Satis relatn4	4Famtyp1	123	.1890	494	.247	.427	1	.514	.884	.610	1.280
Satisrelatn	1Famtyp2	-1.618	.2890	-2.184	-1.051	31.332	1	.000	.198	.113	.349
Satis relatn?	2Famtyp2	-1.848	.1620	-2.166	-1.530	130.098	1	0.000	.158	.115	.216
Satis relatn?	3Famtyp2	-1.055	.0945	-1.240	869	124.542	1	0.000	.348	.289	.419
Satis relatn4	4Famtyp2	621	.1571	929	314	15.648	1	.000	.537	.395	.731
Satisrelatn	1Famtyp3	-2.008	.7896	-3.556	461	6.470	1	.011	.134	.029	.631
Satis relatn?	2Famtyp3	-2.238	.5431	-3.302	-1.174	16.985	1	.000	.107	.037	.309
Satis relatn?	3Famtyp3	949	.2468	-1.433	466	14.792	1	.000	.387	.239	.628
Satis relatn4	4Famtyp3	364	.8404	-2.011	1.284	.187	1	.665	.695	.134	3.610
Satisrelatn	1Famtyp4	7.250E+00					1	0.000	1.000	0.000	0.000
Satisrelatn?	3Famtyp4	0^{a}							1		
(Scale)		1 ^b			1						1

Sexual Relationship Satisfaction Nested in Types of Family

Note. The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. The dependent variable is sexual intimacy. Sexintimacy1= No sexual intimacy; Sexintimacy2 = Very low sexual intimacy; Sexintimacy3 =Low sexual intimacy; Sexintimacy4 = Moderate sexual intimacy; Sexintimacy5 = High sexual intimacy; Very high sexual intimacy (reference group). Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Exp (B) = exponential B. The values of B, and Significant values = less or equal to 0.05 are in bold print. The 0a = reference category. The independent variables are Types of family and Satisfaction with primary relationship; Famtyp1 = monogamous; Famtyp2 =polygamous; Famtyp3 =single; Famtype4 =others (reference group) Satisrelatn1 = not satisfied; Satisrelatn2 = somewhat satisfied; Satisrelatn3 = satisfied; Satisrelatn4 = highly satisfied.

TableA8.9

Interaction between Partner's HIV Status, Had Sex while Drunk, Types of Alcohol, Relationship Satisfaction; and Nesting in Types of Families

Parameter Estimates											
				Inte	rval	Hy	pothesis Te	est		Interval f	or Exp(B)
						Wald Chi-					
Parameter		В	Std. Error	Lower	Upper	Square	df	Sig.	Exp(B)	Lower	Upper
Threshold	Sexintimacy1	-3.555	.7423	-5.010	-2.101	22.942	1	.000	.029	.007	.122
	Sexintimacy2	-2.611	.7391	-4.060	-1.163	12.483	1	.000	.073	.017	.313
	Sexintimacy3	-2.263	.7383	-3.710	816	9.393	1	.002	.104	.024	.442
	Sexintimacy4	.678	.7332	759	2.115	.854	1	.355	1.969	.468	8.287
	Sexintimacy5	1.063	.7332	374	2.500	2.102	1	.147	2.895	.688	12.180
PartHIVstat	t1.Famtyp1	-1.276	.7528	-2.751	.200	2.871	1	.090	.279	.064	1.221
PartHIVstat	t2Famtyp1	552	.7766	-2.074	.971	.505	1	.478	.576	.126	2.639
PartHIVstat	t3Famtyp1	915	.6435	-2.176	.346	2.022	1	.155	.400	.113	1.414
PartHIVstat	t1Famtyp2	-1.235	.7523	-2.709	.240	2.693	1	.101	.291	.067	1.271
PartHIVstat	t2Famtyp2	967	.7779	-2.491	.558	1.544	1	.214	.380	.083	1.747
PartHIVstat	t3Famtyp2	-1.474	.6256	-2.701	248	5.555	1	.018	.229	.067	.780
PartHIVstat	t1Famtyp3	-1.146	.8309	-2.775	.482	1.904	1	.168	.318	.062	1.620
PartHIVstat	t2Famtyp3	930	.8438	-2.584	.724	1.214	1	.270	.395	.075	2.063
PartHIVstat	t3Famtyp3	-1.735	.7347	-3.175	295	5.575	1	.018	.176	.042	.745
PartHIVstat	t2Famtyp4	.654	.8530	-1.018	2.326	.588	1	.443	1.923	.361	10.234
PartHIVstat	t=3Famtyp4	0 ^a							1		
Sexacl=1.Pa	artHIVstat1	.284	.4777	652	1.220	.354	1	.552	1.329	.521	3.388
Sexacl1Part	HIVstat2	-2.098	.3313	-2.748	-1.449	40.113	1	.000	.123	.064	.235
Sexacl1Part	HIVstat3	371	.4068	-1.168	.427	.830	1	.362	.690	.311	1.532
Sexacl2Part	HIVstat1	.432	.5066	561	1.425	.727	1	.394	1.540	.571	4.158
Sexacl2PartHIVstat2		-1.438	.2865	-1.999	876	25.178	1	.000	.238	.135	.416
Sexacl2PartHIVstat3		271	.5043	-1.260	.717	.289	1	.591	.762	.284	2.049
Sexacl3Part	HIVstat1	0^{a}							1		
Typealc1Pa	artHIVstat1	834	.6507	-2.109	.441	1.643	1	.200	.434	.121	1.555
Typealc=1I	PartHIVstat2	1.758	.4972	.783	2.732	12.497	1	.000	5.799	2.188	15.367
Typealc1Pa	artHIVstat3	200	.5880	-1.352	.952	.116	1	.734	.819	.259	2.592
Typealc2Pa	artHIVstat1	670	.5798	-1.806	.466	1.335	1	.248	.512	.164	1.594
Typealc2Pa	artHIVstat2	.940	.4166	.124	1.757	5.093	1	.024	2.561	1.132	5.793
Typealc2Pa	artHIVstat3	689	.5776	-1.821	.443	1.424	1	.233	.502	.162	1.557
Typealc3Pa	artHIVstat1	-1.196	.4905	-2.158	235	5.951	1	.015	.302	.116	.790
Typealc3Pa	artHIVstat2	1.447	.2978	.864	2.031	23.625	1	.000	4.251	2.372	7.621
Typealc3Pa	artHIVstat3	168	.5038	-1.156	.819	.111	1	.739	.845	.315	2.269
Typealc4Pa	artHIVstat1	703	.5331	-1.748	.342	1.740	1	.187	.495	.174	1.407
Typealc4Pa	artHIVstat2	1.473	.4101	.670	2.277	12.906	1	.000	4.364	1.953	9.750
Typealc4Pa	artHIVstat3	.202	.5408	858	1.262	.140	1	.709	1.224	.424	3.532
Typealc5Pa	artHIVstat1	0 ^a							1		
Typealc5Pa	artHIVstat2	1.612	.5524	.529	2.694	8.513	1	.004	5.011	1.697	14.796
Typealc5Pa	artHIVstat3	0 ^a							1		
Satisrelatnl	PartHIVstat1	826	.3332	-1.479	172	6.138	1	.013	.438	.228	.842
Satisrelatn	PartHIVstat2	-1.687	.3757	-2.423	951	20.162	1	.000	.185	.089	.387
Satis relatn l	PartHIVstat3	723	.5776	-1.855	.409	1.568	1	.210	.485	.156	1.505
Satis relatn2	2PartHIVstat1	946	.2644	-1.464	428	12.796	1	.000	.388	.231	.652
Satis relatn2	2PartHIVstat2	-1.542	.3015	-2.133	951	26.163	1	.000	.214	.118	.386
Satis relatn2	2PartHIVstat3	-1.572	.3872	-2.330	813	16.472	1	.000	.208	.097	.444
Satis relatn3	3PartHIVstat1	437	.1650	760	113	7.005	1	.008	.646	.468	.893
Satisrelatn	3PartHIVstat2	288	.2630	804	.227	1.201	1	.273	.750	.448	1.255
Satis relatn3	3PartHIVstat3	470	.3593	-1.174	.235	1.708	1	.191	.625	.309	1.264
(Scale)		1 ^b									

Note: The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis. The dependent variable is sexual intimacy. Sexintimacy1= No sexual intimacy; Sexintimacy2 = Very low sexual intimacy; Sexintimacy3 =Low sexual intimacy; Sexintimacy4 = Moderate sexual intimacy; Sexintimacy5 = High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Exp (B) = exponential B. The values of B, and Significant values = less or equal to 0.05 are in bold print. The 0a = reference group. The independent variables are Family types; Desire favours; Partner's HIV status; Sex while drunk; Types of alcohol; and Satisfaction with primary relationship; Famtyp1 = monogamous; Famtyp2 =polygamous; Famtyp3 =single; Famtype4 =others (reference group). Reasfavor1 = strongly disagree (favours); Reasfavor2 = disagree (favours); Reasfavor3 = agree (favours); Reasfavor4 = strongly agree (reference group, favours); PartHIVstat1 = positive (partners' HIV status); PartHIVstat2 = negative; PartHIVstat3 = don't know (reference group). Sexacl1 = yes; Sexacl2 = no; Sexacl3 = never used alcohol (reference group). Typeacl1= Ogogoro; Typeacl2 = Burukutuu; Typeacl3 = Beer; Typeacl4 = Palm wine; Typeacl5 = others; Typeacl6 = never used alcohol; Satisrelatn1 = not satisfied; Satisrelatn2 = somewhat satisfied; Satisrelatn3 = satisfied; Satisrelatn4 = highly satisfied.

Table A8.10

Interaction between Partner Stay away and Number of Sexual Partners; and Nesting of had Sex while drunk in the Locations

Parameter Estimates											
				Inter	rval	Hy	ypothesis Te	est		Interval fo	or Exp(B)
						Wald Chi-					
Parameter		В	Std. Error	Lower	Upper	Square	ďf	Sig.	Exp(B)	Lower	Upper
Threshold	[Sexintimacy 1.	-5.514	.6092	-6.708	-4.320	81.918	1	0.000	.004	.001	.013
	Sexintimacy2	-4.298	.5958	-5.465	-3.130	52.021	1	.000	.014	.004	.044
	Sexintimacy3	-3.901	.6159	-5.109	-2.694	40.131	1	.000	.020	.006	.068
	Sexintimacy4	539	.5770	-1.670	.592	.873	1	.350	.583	.188	1.807
	Sexintimacy 5	015	.5499	-1.093	1.063	.001	1	.979	.985	.335	2.895
[Whatsupp	v=1.00]	128	.1654	452	.196	.596	1	.440	.880	.636	1.217
[Whatsupp	=2.00]	.392	.2124	024	.808	3.405	1	.065	1.480	.976	2.244
[Whatsupp	=3.00]	811	.3407	-1.479	144	5.673	1	.017	.444	.228	.866
[Whatsupp	=4.00]	0 ^a							1		
[Reasfavor-	=1.00]	1.019	.3198	.392	1.646	10.159	1	.001	2.771	1.481	5.186
[Reas favor-	=2.00]	.832	.3108	.222	1.441	7.158	1	.007	2.297	1.249	4.224
[Reasfavor-	=3.00]	.604	.2846	.046	1.162	4.506	1	.034	1.830	1.047	3.196
[Reasfavor-	=4.00]	0 ^a							1		
[PartHIVsta	at=1.00]	.512	.2195	.082	.942	5.441	1	.020	1.669	1.085	2.566
[PartHIVsta	at=2.00]	.893	.1819	.536	1.249	24.087	1	.000	2.442	1.709	3.488
[PartHIVsta	at=3.00]	0 ^a							1		
[Typealc=1	.00]	3.073	.6759	1.749	4.398	20.679	1	.000	21.617	5.748	81.301
[Typealc=2	.00]	2.423	.6499	1.149	3.696	13.896	1	.000	11.276	3.155	40.302
[Typealc=3	.00]	2.998	.4977	2.022	3.973	36.272	1	.000	20.036	7.554	53.145
[Typealc=4	.00]	3.863	.5521	2.781	4.945	48.958	1	.000	47.616	16.136	140.514
[Typealc=5	.00]	3.042	.8759	1.326	4.759	12.066	1	.001	20.957	3.765	116.653
[Typealc=6	.00]	0 ^a							1		
[Satis relatn	=1.00]	629	.3392	-1.294	.035	3.443	1	.064	.533	.274	1.036
[Satis relatn	=2.00]	414	.2632	930	.102	2.470	1	.116	.661	.395	1.108
[Satis relatn	=3.00]	.073	.1926	305	.450	.142	1	.706	1.075	.737	1.568
[Satis relatn	=4.00]	0 ^a							1		
Partwives		944	.1773	-1.292	597	28.360	1	.000	.389	.275	.551
Peverstaya	w1 Nsexpart	-1.151	.1468	-1.439	863	61.483	1	.000	.316	.237	.422
Peverstaya	w2 Nsexpart	-1.306	.1574	-1.615	998	68.849	1	.000	.271	.199	.369
Peverstaya	w3 Nsexpart	-1.468	.1903	-1.841	-1.095	59.541	1	.000	.230	.159	.334
Peverstaya	w4 Nsexpart	-1.582	.1706	-1.916	-1.247	85.965	1	0.000	.206	.147	.287
Peverstaya	w5 Nsexpart	-1.762	.2124	-2.179	-1.346	68.796	1	.000	.172	.113	.260
Sexacl=1.Re	elocation=1	-3.875	.6125	-5.075	-2.675	40.026	1	.000	.021	.006	.069
Sexac12Relo	ocation 1	-3.416	.7037	-4.795	-2.037	23.563	1	.000	.033	.008	.130
Sexac13Relo	ocation 1	210	.3031	804	.384	.479	1	.489	.811	.448	1.469
Sexac11Relo	ocation 2	-3.205	.6370	-4.454	-1.957	25.317	1	.000	.041	.012	.141
Sexacl2Relo	ocation 2	-3.036	.4883	-3.993	-2.079	38.669	1	.000	.048	.018	.125
Sexac13Relo	ocation2	.662	.2709	.132	1.193	5.981	1	.014	1.940	1.141	3.298
Sexac11Relo	ocation 3	-3.776	.6708	-5.091	-2.461	31.681	1	.000	.023	.006	.085
Sexacl2Relo	ocation3	-3.834	.6085	-5.027	-2.641	39.705	1	.000	.022	.007	.071
Sexac 3Relo	cation3	322	.2462	805	.160	1.713	1	. 191	.725	.447	1.174
Sexac11Relo	ocation 4)	-4.186	.6014	-5.365	-3.007	48.452	1	.000	.015	.005	.049
Sexacl2Relo	ocation4	-4.298	.7297	-5.729	-2.868	34.698	1	.000	.014	.003	.057
Sexac13Relo	ocation4	0 ^a							1		
(Scale)		1 ^b									

Note: The source of the data is from field survey, 2014. . The Generalised Linear Regression with Cumulative Logit Link (Multinomial analysis) was used for analysis.

The dependent variable is sexual intimacy. Sexintimacy1 = No sexual intimacy; Sexintimacy2 = Very low sexual intimacy; Sexintimacy3 =Low sexual intimacy; Sexintimacy4 = Moderate sexual intimacy; Sexintimacy5 = High sexual intimacy; Very high sexual intimacy (reference group); Std. Error = standard error; df = degree of freedom; B = intercept values (Threshold); Sig = significance; Exp (B) = exponential B. The values of B, and Significant values = less or equal to 0.05 are in bold print. The 0a = reference group. The independent variables are Desire favours; Partner's HIV status; Sex while drunk; Types of alcohol; Satisfaction with primary relationship; Partner's number of wives; Number of sexual partners; Partner ever stayed away; and Location of residence. Reasfavor1 = strongly disagree (favours); Reasfavor2 = disagree (favours); Reasfavor3 = agree (favours); Reasfavor4 = strongly agree (reference group, favours); PartHIVstat1 = positive (partners' HIV status); PartHIVstat2 = negative; PartHIVstat3 = don't know (reference group). Sexacl1 = yes (had sex while drunk); Sexacl2 = no; Sexacl3 = never used alcohol (reference group). Typeacl1= Ogogoro (types of alcohol); Typeacl2 = Burukutuu; Typeacl3 = Beer; Typeacl4 =Palm wine; Typeacl5 = others; Typeacl6 = never used alcohol; Satisrelatn1 = not satisfied (relationship satisfaction); Satisrelatn2 = somewhat satisfied; Satisrelatn3 = satisfied; Satisrelatn4 = highly satisfied. Partwives = partners number of wives. Numsexpart = number of sexual partners; Peversayway1 = partner ever stay away for less than 3 months; Peversayway2 = 3 months or more bur less than 6; Peversayway3 = 6 months or more but less than 9; Peversayway4 = 9 months or more but less than 1 year; Peversayway5 = 1 year or more. Relocation1 = rural-Ichongu (location); Relocation2 = rural-Ipusu; Relocation3 = urban-Ichongu; Relocation4 = urban-Ipusu.

APPENDIX B

Distribution of Sexual capacity, Sexual performance, Sexual motivation, HIV, and Sexual webs Variables by Location of Residence

B1.1 Introduction

This section examines the distribution of sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables by location of residence.

B1.2 Sexual Capacity Variables by Location of Residence

This sub-section will focus on individual, family and structural variables by location of residence.

B1.2.1 Individual Variables by Location of Residence

There are more females in all the locations except in rural-Ichongu, where there are 51.7% males as against 48.3% females. Generally, there are younger individuals below 35 years than those above the age. Those who have reported that they are below the age of 35 years constitute 70.9% of the entire sample size. Whereas in rural-Ichongu and urban-Ipusu, the age group between 25 and 29 years predominate the samples from these locations; those that are between the ages of 20 and 24 years (22,7%), and 30-34 years (25.1%) predominate the samples from rural-Ipusu and urban-Ichongu respectively. As earlier mentioned in chapter 1, marriage is near universal phenomenon in the study area. Those who have reported that they are married constitute the largest group in the samples in all the locations. Urban-Ipusu has the higher number of married individuals with 56%. Those who have reported that they are single (44.5%) and divorced (5.3%) are the predominant groups in Urban-Ichongu, while those who are widows predominate in urban-Ipusu. By educational background, urban-Ichongu has the highest percentage of individuals with tertiary education (37.8%). Those without formal education (10.5%) and primary education (12.8%) predominate in rural-Ichongu, while those with secondary education predominate in urban-Ipusu. Conversely, partners' levels of education attainment indicate that those without formal education predominate in urban-Ichongu (11.4%), while those with secondary education (50.5%) and tertiary education (33.3%) predominate in rural-Ipusu. Urban-Ipusu has the highest number of partners with primary education (see Table B1a and b).

Table B1a

	T	<u>(D)</u>				
	Location of	of Respondents R	lesidence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
		Sex				
Male	51.7%	42.7%	48.2%	44.5%	749	46.8
Female	48.3%	57.3%	51.8%	55.5%	852	53.2
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Age of Re	spondents				
18-19yrs	11.0%	17.7%	8.9%	3.4%	163	10.2
20-24yrs	22.5%	22.7%	18.3%	10.0%	293	18.3
25-29yrs	24.3%	17.4%	19.5%	24.1%	342	21.4
30-34yrs	20.5%	16.7%	25.1%	21.7%	336	21.0
35-39yrs	5.5%	6.1%	4.8%	13.4%	120	7.5
40-44yrs	7.8%	7.8%	9.1%	9.2%	136	8.5
45-49yrs	5.8%	5.8%	5.6%	7.3%	98	6.1
50-54yrs	1.5%	3.5%	4.8%	6.8%	67	4.2
55-59yrs	1.3%	1.8%	2.5%	3.2%	35	2.2
60+	0.0%	0.5%	1.3%	1.0%	11	0.7
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Sex, and Age by Location of Respondents Residence

Note. The source of data is from field survey, 2014

Table B1b

Relationship status; Educational Attainment; and Partners' Education by Location of Respondents Residence

	Location of	Respondents Re	esidence								
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%					
	Ichongu		Ichongu								
	Relations	ship status									
Married	40.0%	54.5%	54.3%	56.0%	820	51.2					
Single	44.5%	34.8%	28.9%	23.6%	527	32.9					
Widowed	7.2%	6.8%	6.6%	10.0%	123	7.7					
Divorced	5.0%	1.0%	5.3%	3.4%	59	3.7					
Separated	3.0%	2.5%	3.8%	6.8%	65	4.1					
Cohabiting	0.3%	0.3%	1.0%	0.2%	7	0.4					
Total	400	396	394	411	1610						
%	100	100	100	100	100						
	Level of Educational Attainment of the Respondents										
No formal schooling	10.5%	4.8%	9.4%	5.8%	112	7.6					
Primary	12.8%	10.1%	9.6%	14.4%	188	11.7					
Secondary	42.0%	53.0%	43.1%	51.8%	761	47.5					
Tertiary	34.8%	32.1%	37.8%	28.0%	530	33.1					
Total	400	396	394	411	1601						
%	100	100	100	100	100						
	Partners' Leve	l of Educational	Attainment								
No formal schooling	10.8%	4.8%	11.4%	7.3%	137	8.6					
Primary	12.3%	11.4%	12.4%	16.1%	209	13.1					
Secondary	48.0%	50.5%	46.2%	45.0%	759	47.4					
Tertiary	29.0%	33.3%	29.9%	31.6%	496	31.0					
Total	400	396	394	411	1601						
%	100	100	100	100	100						

Note. The source of data is from field survey, 2014

The distribution of respondents' occupation by location of residence shows that rural-Ipusu has the highest number of farmers (32.3%), while those who are unemployment (12.3%) and who are students (32.3%) predominate in rural-Ichongu. Business individuals are more in urban-Ipusu than in the other locations. Conversely, more partners are unemployed (12.1%), and are students (28.5%) in rural-Ipusu than in the other locations, while there are more partners who are business individuals in urban-Ipusu (32.4%; see Table B2a).

With regard to income, the common pattern is that, there are more individuals with low income below Twenty Five Thousand Naira (AUD 167) per month in all the locations. However, rural-Ichongu has the highest number of low income individuals with less Twenty Five Thousand Naira per month (77.8%), while urban-Ichongu has the highest number of individuals with income above One Hundred Thousand Naira (AUD 667) per month (3.8%; see Table B2b).

Similarly, there more Christians in all the locations; however, there are predominantly Christians in urban-Ipusu (97.1%), while there are more traditionalists in urban-Ichongu (9.1%) and Muslim in rural-Ipusu (3.8%; see Table B1). Fewer individuals are officials of their religious organisations. There are more individuals who are officials of their religious organisation in rural-Ichongu (11.8%) and urban-Ipusu (10.0%) than the other areas (see Table B2b). Relatively, 32.0% and 30.2% individuals attend their religious organisation activities regularly in rural-Ichongu and urban-Ipusu respectively. Most of the respondents in all the locations are Catholics; however, there are more Catholics in rural-Ichongu (68.8%) than in the other areas. The Protestants (37.0%) and Pentecostal (16.5%) are predominantly in urban-Ipusu and urban-Ichongu (see Tables B3).

Table B2a

	Location of	f Respondents Re	esidence		
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total %
	Ichongu	-	Ichongu	-	
Occupation					
Farming	26.3%	32.3%	27.7%	26.5%	451 28.2
Civil service	12.8%	6.6%	18.8%	12.7%	203 12.7
Business	16.3%	14.4%	22.8%	36.7%	363 22.7
Student	32.3%	31.1%	18.0%	10.5%	366 22.9
Unemployed	12.3%	11.6%	10.7%	9.2%	175 10.9
Others	0.3%	4.0%	2.0%	4.4%	43 2.7
Total	400	396	394	411	1601
%	100	100	100	100	100
	Partners' main	Occupation			
Farming	27.5%	32.6%	28.2%	28.7%	468 29.2
Civil service	13.8%	13.6%	14.7%	20.9%	253 15.8
Business	20.3%	13.4%	32.0%	32.4%	393 24.5
Student	28.5%	25.3%	12.4%	6.6%	290 18.1
Unemployed	10.0%	12.1%	11.7%	8.3%	168 10.5
Others	0.0%	3.0%	1.0%	3.2%	29 1.8
Total	400	396	394	411	1601
%	100	100	100	100	100

Respondents' Occupation, and Partners' main Occupation by Location of Residen	се
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Note. The source of data is from field survey, 2014.

Table B2b

	Location of Respondents Residence								
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%			
	Ichongu		Ichongu						
	Income of Res	pondents							
Less than 25,000	77.8%	77.3%	64.7%	76.4%	1186	74.1			
25,000-49,000	14.2%	18.2%	24.1%	15.3%	287	17.9			
50,000-99,000	7.2%	4.0%	7.4%	5.8%	98	6.1			
100,000 +	0.8%	0.5%	3.8%	2.4%	30	1.9			
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Respondents'	Religion							
Christianity	93.5%	95.5%	89.3%	97.1%	1503	93.9			
Islam	3.0%	0.5%	1.3%	1.2%	24	1.5			
Traditional religion	3.3%	3.8%	9.1%	1.5%	70	4.4			
Others	0.3%	0.3%	0.3%	0.2%	4	0.2			
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Officials of Re	eligious organisa	ation						
Strongly Disagree	6.0%	15.9%	16.0%	7.3%	180	11.2			
Disagree	46.8%	54.8%	30.7%	44.8%	709	44.3			
Agree	35.5%	24.2%	43.9%	38.0%	567	35.4			
Strongly agree	11.8%	5.1%	9.4%	10.0%	145	9.1			
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Income of respondents, Religion, Official of Religious Organisation by Location of Residence

Note. The source of data is from field survey, 2014

Table B3

Respondents' Regular Attendance of Religious Activities by Location of Residence

	Locatio	on of Responden	ts Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
Regular attendance						
Strongly disagree	17.3%	12.5%	58.7%	11.5%	104	6.5
Disagree	26.0%	29.2%	22.2%	22.7%	415	25.9
Agree	23.3%	26.6%	22.4%	27.7%	857	53.5
Strongly agree	32.9%	15.1%	21.8%	30.2%	225	14.1
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Respondents' I	Religious Organi	sation			
Catholic	68.8%	52.5%	47.5%	50.9%	879	54.9
Protestant	17.3%	34.8%	25.4%	37.0%	459	28.7
Pentecostal	7.5%	8.1%	16.5%	9.2%	165	10.3
Islam	3.0%	0.5%	1.3%	1.2%	24	1.5
Traditional	3.3%	3.8%	9.1%	1.5%	70	4.4
Others	0.3%	0.3%	0.3%	0.2%	4	0.2
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Note. The source of data is from field survey, 2014

B1.2.2 Family Variables by Location of Residence

The distribution of the respondents by types of family they come from reveals that 61.4% of the respondents in rural-Ipusu are from monogamous families, while 57.3% of them in rural-Ichongu are from polygamous families. Individuals who are from Polygamous families (47%) and the single families (11.9%) predominate in urban-Ichongu (see Table B4). Some of the individuals have reported that they receive support in form of cash or material from their family members. Majority of those who have received support in form of cash from their family members are from rural-Ipusu (55.6%), while most of the individuals in rural-Ichongu have received material support (25.8%). Whereas urban-Ichongu has the highest number of respondents who received both cash and material support (7.2%), urban-Ipusu has the highest number of individuals who did not receive support of any type from family members (46.2%; see Tables B4).

Table B4

	Locatio	n of Responden	ts Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
Family Type						
Monogamous	39.0%	61.4%	41.1%	48.4%	760	47.5
Polygamous	57.3%	35.4%	47.0%	49.4%	757	47.3
Single	3.3%	3.3%	11.9%	2.2%	82	5.1
Others	0.5%	0.0%	0.0%	0.0%	2	0.1
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Types of F	amily Support				
Money	46.3%	55.6%	40.4%	40.6%	731	45.7
Material	25.8%	6.6%	13.7%	13.1%	237	14.8
Both	7.2%	2.5%	9.6%	0.0%	77	4.8
No support	20.8%	35.4%	36.3%	46.2%	556	34.7
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Family Type Respondents have come from by Location of Residence

Note. The source of data is from field survey, 2014.

B1.2.3 Structural Factors by Location of Residence

In all the study locations, religious laws seem to be the predominant laws guiding sexual relationships. However, rural-Ichongu has the highest number of individuals whose relationships are guided by religious laws (62.5%). In urban-Ipusu, customary laws predominate, while urban-Ichongu has the highest number of individuals whose relationships are guided by court laws (2.3%, see Table B5a). Similarly, in all the locations, the

respondents have identified that Nollywood films influence sexual behaviours. Whereas, 51.5% and 61.3% of individuals in rural-Ichongu and urban-Ipusu respectively, have agreed that Nollywood firms influence illicit sex, 37.5% of respondents in rural-Ichongu strongly affirm that Nollywood films encourage illicit sex (see Tables B5b). Furthermore, the drinking places and hotels also influence sexual behaviours. Forty seven percent of respondents in rural-Ichongu and 62.4% of those in rural-Ipusu strongly affirm that drinking places influence illicit sexual behaviours. With regard the hotels, 61.3% of the respondents in urban-Ipusu and 51.5% of those in rural-Ichongu have affirmed respectively hotels influence illicit sexual behaviours (see Table B5b).

Table B5a

Location of Respondents Residence									
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	su Total %				
	Ichongu		Ichongu						
Laws									
Religious laws	62.5%	37.1%	57.6%	38.0%	780	48.7			
Customary laws	22.8%	44.2%	26.4%	48.2%	568	35.5			
Court laws	1.5%	1.5%	2.3%	1.5%	27	1.7			
Others	13.3%	17.2%	13.7%	12.4%	226	14.1			
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Laws Guiding Relationship by Location of Respondents Residence

Note. The source of data is from field survey, 2014.

Table B5b

Nollywood	Influence on	Illicit sex;	Drinking	Places	Influence	on Il	licit S	Sex;	and .	Hotel
Influence on	Illicit Sex b	y Location	of Respon	idents I	Residence					

	Locati	on of Responden	its Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
	Nollywood Filn	ns Influence on I	llicit Sex			
Strongly disagree	5.3%	3.3%	5.8%	5.8%	81	5.1
Disagree	10.8%	32.3%	10.7%	9.5%	252	15.7
Agree	46.5%	44.2%	52.3%	52.1%	781 4	48.8
Strongly agree	37.5%	20.2%	31.2%	32.6%	487 🤅	30.4
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Drinking Places	Influence on Illi	icit Sex			
Strongly disagree	2.8%	4.0%	4.3%	2.4%	54	3.4
Disagree	7.8%	10.6%	7.6%	14.8%	164	10.2
Agree	42.3%	62.4%	53.6%	43.8%	806	50.3
Strongly agree	47.3%	23.0%	34.5%	39.2%	577	36.0
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Hotel Influence	on Illicit Sex				
Strongly disagree	1.3%	5.8%	5.3%	2.7%	60	3.7
Disagree	5.0%	24.0%	7.1%	3.2%	156	9.7
Agree	42.3%	51.8%	56.6%	61.3%	849	53.0
Strongly agree	51.5%	18.4%	31.0%	32.8%	536	33.5
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Note. The source of data is from field survey, 2014.

B2. Motivation Variables by Location of Residence

The respondents in urban-Ichongu (65.5%) and rural-Ipusu (38.9%) are mostly influenced by love to engage in sexual relationships, while 37.1% and 9.8% of those in urban and rural-Ichongu respectively affirmed that the need for money lured them to have sexual relationships. The desire for children as motivation for sexual relationship is high in all the location but more pronounced in urban-Ichongu (58.6%) and rural-Ichongu (49.8%). Similarly, pleasure seeking as motivation for relationship is higher in urban-Ichongu (47%) and rural-Ichongu (32.5%) than in all the other locations. Those looking for a place to live through having sexual relationships are more in urban-Ipusu (38%) and urban-Ichongu (11.2%) than in the other areas (see Tables B6a , and b)

Table B6a

Motivation of Love; Need Money, and Desire for Children by Location of Respondents

Residence

	Locati	on of Responder	ts Residence		
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total %
	Ichongu		Ichongu		
Love					
Strongly disagree	5.0%	3.0%	2.3%	3.9%	57 3.6
Disagree	12.3%	4.0%	5.8%	7.3%	118 7.4
Agree	56.3%	54.0%	69.5%	65.5%	982 61.3
Strongly agree	26.5%	38.9%	22.3%	23.4%	444 27.7
Total	400	396	394	411	1601
%	100	100	100	100	100
	Need Mone	у			
Strongly disagree	19.8%	10.4%	25.6%	17.0%	291 18.2
Disagree	45.5%	46.0%	27.9%	47.9%	671 41.9
Agree	25.0%	35.9%	37.1%	30.2%	512 32.0
Strongly agree	9.8%	7.8%	9.4%	4.9%	127 7.9
Total	400	396	394	411	1601
%	100	100	100	100	100
	Desire for Child	lren			
Strongly disagree	3.0%	10.1%	6.1%	5.8%	100 6.2
Disagree	14.5%	28.5%	13.7%	26.8%	335 20.9
Agree	32.8%	38.6%	58.6%	50.4%	722 45.1
Strongly agree	49.8%	22.7%	21.6%	17.0%	444 27.7
Total	400	396	394	411	1601
%	100	100	100	100	100

Note. The source of data is from field survey, 2014.

Table B6b

Desire for Pleasure; and Desire for Place to Live by Location of Respondents Residence

	Locatio	on of Responden	ts Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
	Desire f	or Pleasure				
Strongly disagree	10.3%	3.0%	12.2%	8.5%	136	8.5
Disagree	21.8%	26.8%	24.4%	36.3%	438	27.4
Agree	35.5%	41.7%	47.0%	42.3%	666	41.6
Strongly agree	32.5%	28.5%	16.5%	12.9%	361	22.5
Total	400	396	394	411	1601	
%	100	100	100	100	100	
	Place to Live					
Strongly disagree	20.0%	21.5%	23.1%	18.2%	331	20.7
Disagree	45.5%	62.6%	32.5%	39.2%	719	44.9
Agree	27.3%	11.6%	33.2%	38.0%	442	27.6
Strongly agree	7.2%	4.3%	11.2%	4.6%	109	6.8
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Note. The source of data is from field survey, 2014.

Some respondents are those who seek for favours in their various relationships. Such individuals are more in rural-Ichongu (49%) and urban-Ipusu than the other locations. The combined effects of love and desire for children as reasons for sexual relations are generally high in all the locations. However, it more in urban-Ipusu (40.4%) than all the other locations, while the combined effects of love, desire for children and need money is higher in urban-Ichongu (36%) than the other locations. The respondents influenced by the combined effects of favours and pleasure for relationship are more in rural-Ichongu (30.5%), while the respondents who have been influenced by combined effects of favours, pleasure, and place to live are more in urban-Ichongu (27.2%) than all the other locations(see Table B7)

Table B7

	Locatio	n of Responden	ts Residence					
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Tota	1 %		
	Ichongu		Ichongu					
		Favours						
Strongly disagree	9.8%	22.7%	20.8%	21.9%	301	18.8		
Disagree	17.8%	46.7%	28.9%	31.4%	499	31.2		
Agree	49.0%	27.0%	39.8%	43.6%	639	39.9		
Strongly agree	23.5%	3.5%	10.4%	3.2%	162	10.1		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
Combined motivations of Love, Need money and Desire for Children								
Love or money or child	27.0%	25.3%	16.2%	27.5%	385	24.0		
Child and Money	2.3%	5.1%	1.3%	9.5%	73	4.6		
Love and money	3.3%	12.1%	7.6%	2.7%	102	6.4		
Love and child	39.8%	33.6%	38.8%	40.4%	611	38.2		
Love and money and child	27.8%	24.0%	36.0%	20.0%	430	26.9		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
Combin	ed Motivations	of Pleasure, Pla	ce to Live and Fa	vours				
pleasure or place or favours	36.5%	74.7%	48.5%	50.9%	842	52.6		
Place and favours	9.0%	0.8%	9.9%	7.5%	109	6.8		
Pleasure and place	3.0%	5.6%	5.6%	9.0%	93	5.8		
Pleasure and favours	30.5%	10.6%	8.9%	10.9%	244	15.2		
Pleasure and place and favours	21.0%	8.3%	27.2%	21.7%	313	19.6		
Total	400	396	394	411	1601			
%	100	100	100	100	100			

Favours; Combined Effect of Motivation Factors by Location of Respondents Residence

Note. The source of data is from field survey, 2014

The phenomenon of individuals assisting their partners is generally high in all the areas; however, it is higher in urban-Ipusu (72%) than all the other locations. Whereas the respondents without children in their primary partners are more in rural-Ichongu (59.3%), the individuals with more than two children in their primary partners are more in rural-Ipusu (119.9%) than all the other locations. Those having two children or more in sexual relationship with other partners rather their primary partners are more in urban-Ipusu (11.6%) and urban-Ichongu (10.4%) than the other locations. Furthermore, there are individuals who have stay away from their primary partners for one reason or the other. Such people who have stayed away from their primary partners for more than nine months are more in rural-Ipusu (9.8%) and urban-Ipusu (9.7%) than the other locations (see Tables B8).

Table B8

Partners' Assistance; Number of Ch	ldren with Partners, by	y Location of Residence
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Location of Respondents Residence								
	Rural-Ichongu	Rural-Ipusu	Urban-Ichongu	Urban-Ipusu	Total %			
Partner Assistance								
Yes	68.2%	71.0%	70.1%	72.0%	1126 70.3			
No	31.8%	29.0%	29.9%	28.0%	475 29.7			
Total	400	396	394	411	1601			
%	100	100	100	100	100			
Number of Children with Primary Partners								
No child	59.3%	47.5%	38.8%	44.8%	762 47.6			
One child	14.0%	15.7%	23.1%	13.1%	263 16.4			
Two children	12.8%	16.9%	20.8%	21.9%	290 18.1			
Three or more	14.0%	19.9%	17.3%	20.2%	286 17.9			
Total	400	396	394	411	1601			
%	100	100	100	100	100			
1	Number of Children	with other Partners	S					
No child	71.7%	81.0%	66.3%	66.0%	925 70.5			
One child	11.9%	7.4%	15.0%	10.2%	149 11.4			
Two children	8.6%	5.4%	10.4%	12.1%	124 9.5			
Three or more	7.7%	6.2%	8.4%	11.6%	114 8.7			
Total	400	396	394	411	1601			
Pe	eriod of Stay away fr	om Primary Partn	er					
Less than three months	51.0%	41.9%	54.1%	70.1%	871 54.4			
Three months to less than six	32.5%	33.8%	25.6%	12.9%	418 26.1			
Six months to less than nine	5.0%	11.4%	6.3%	4.1%	107 6.7			
Nine months to less than a year	5.0%	9.8%	8.1%	3.2%	104 6.5			
One year or more	6.5%	3.0%	5.8%	9.7%	101 6.3			
Total	400	396	394	411	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014.

B3. Sexual Performance Variables by Location of Residence

The common type of sexual relationship in all the locations is heterosexual relationship. The respondents that are in heterosexual relationship are more than 98% of the sample from each of the locations. However, there are small numbers of bisexual relationships (2.7%) in urban-Ipusu; there are homosexual relationships (1%) in rural-Ipusu, and lesbian relationships (0.3%) in rural-Ichongu. The relationships which are less than one year old are more in rural-Ichongu and urban-Ichongu (25%) than the other areas, while the relationships which are more than one year, but less than five years old (49.5%) predominate in rural-Ipusu.

Furthermore, the relationships which are over five years old (43.3%) are more in urban-Ipusu than all the other locations (see Tables B9). With regard to the number of wives kept by the men, those who have reported that they have two or more wives predominate in urban-Ichongu (89.7%) and urban-Ipusu (93.8%). see Tables B9).

Table B9

Type of Sexual Relationship; Age of Sexual Relationship; and Partners' Number of Wives; by Location of Residence

Location of Respondents Residence								
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%		
	Ichongu		Ichongu					
Type of relationship								
Heterosexual	98.0%	98.0%	98.2%	97.1%	1566	97.8		
Bisexual	1.8%	1.0%	1.8%	2.7%	29	1.8		
Lesbian	0.3%	0.0%	0.0%	0.2%	2	0.1		
Homosexual	0.0%	1.0%	0.0%	0.0%	4	0.2		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
Age of Sexual Relationship								
Less than 1 year	25.5%	4.6%	25.4%	18.0%	334	20.9		
Over 1 but less than 5	46.0%	49.5%	38.8%	38.7%	692	43.2		
Over 5 years	28.5%	35.9%	35.8%	43.3%	575	35.9		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
	Partners' Number	r of Wives						
One	15.9%	33.5%	10.3%	6.2%	142	16.7		
Two	70.3%	56.8%	71.1%	79.2%	590	69.2		
More than two	13.8%	9.7%	18.6%	14.6%	120	14.1		
Total	400	396	394	411	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014

In addition, some of the men are keeping secret relationships. Such men are more in rural-Ichongu (52.8%) and urban-Ichongu (51%). Some women are also keeping secret sexual relationships. Those who are keeping secret lovers are more in rural-Ichongu (40.5%) and urban-Ipusu (35%) than the other locations. Furthermore, women and men who keep more than one sexual partner are more in urban-Ichongu (87.6%) and urban-Ipusu (90.7%) than the other locations. Generally, the numbers of individuals who had ever used condoms are high in all the location; however, urban-Ichongu (83.2%) and urban-Ipusu (89.1%) have higher numbers of those who had ever used condoms, than the other locations (see Tables B10).

Table B10

	Locat	tion of Responden	ts Residence						
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Tota	1 %			
	Ichongu		Ichongu			, .			
Secret wives	0		6						
Yes	52.8%	28.2%	51.0%	39.8%	361	42.4			
No	47.2%	71.8%	49.0%	60.2%	491	57.6			
Total	195	227	204	226	852				
%	100	100	100	100	100				
Knowledge of Partners' (Female) Secret Lovers									
Yes	40.5%	34.9%	30.0%	35.1%	264	35.2			
No	59.5%	65.1%	70.0%	24.6%	485	64.8			
Total	205	169	190	185	749				
%	100	100	100	100	100				
	Number of Se	xual Partners							
One	16.5%	34.3%	12.4%	9.2%	289	18.1			
Two	46.3%	48.2%	57.9%	72.7%	903	56.4			
Three	37.3%	17.4%	29.7%	18.0%	409	25.5			
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Ever Use	ed Condoms							
Yes	76.8%	71.5%	83.2%	89.1%	1284	80.2			
No	23.2%	28.5%	16.8%	10.9%	317	19.8			
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Knowledge of Partners (Male) Secret Wives; Partners' (Female) Secret Lovers; Number of Sexual Partners; and Ever Used Condoms; by Location of Residence

Note. The source of data is from field survey, 2014. The total is less than 1601in the case of secret relationships because the question for women is different from that of the men.

The common type of condoms available for use is the male condoms; over 98% of the respondents in all the locations use the male condoms. However, fewer numbers of individuals use the female condoms in rural-Ipusu (0.7%) and urban-Ipusu (1.1%). In similar way, the common brand of male condoms used by the respondents is the Gold circle. More than 74% of the respondents in each location use Gold circle. Whereas the highest numbers of users of Rough Rider are from rural-Ichongu (18.6%), most of those who use Lifestyle and Fantasy brand of condoms are from rural-Ipusu (7.8%; see Tables B11).

Several reasons have been given for the choice of condoms brand by the respondents. The common reason is the availability of the brand. It is responsible for choice of brand in rural-Ichongu (48.7%), rural-Ipusu (51.6%) and urban-Ichongu (62.5%), except in urban-Ipusu where quality (60.3%) seems to be the reason for the choice of condoms brand. Though there are individuals who are going for the brands that are cheaper, majority of them are from rural-Ichongu (14.3%; see Table B11).

Table B11

Types of Condoms; Brand; and Choice of condoms Brand; by Location of Residence

	Location of Respondents Residence								
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%			
	Ichongu		Ichongu						
Condoms type									
Male	100.0%	99.3%	100.0%	98.9%	1278	99.5			
Female	0.0%	0.7%	0.0%	1.1%	6	0.5			
Total	307	283	328	366	1284				
%	100	100	100	100	100				
	Condoms Brand	s Used by Respon	ndents						
Gold circle	74.3%	77.4%	74.7%	91.3%	1026	79.9			
Rough Rider	18.6%	4.9%	11.3%	4.1%	123	9.6			
Lifestyle	0.3%	7.8%	6.1%	0.3%	44	3.4			
Fantasy	0.0%	7.8%	5.2%	0.3%	40	3.1			
Others	6.8%	2.1%	2.7%	4.1%	51	4.0			
Total	307	283	328	366	1284				
%	100	100	100	100	100				
	Reasons for Ch	oice of Condoms	Brand						
Availability	48.7%	51.6%	62.5%	24.4%	529	50.1			
Cheap	14.3%	1.8%	1.2%	5.8%	61	5.8			
Pleasure	3.7%	19.3%	12.9%	2.6%	110	10.4			
Quality	29.0%	26.9%	21.8%	60.3%	326	30.9			
Others	4.3%	0.4%	1.5%	7.1%	30	2.8			
Total	300	275	325	411	1056				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for condoms users only.

There are some of the respondents who have experienced either condoms breakage or slip off or both during usage. The phenomenon of condoms breakage during usage is high in rural-Ichongu (55.8%) and urban-Ichongu (49.2%). Condoms slip off is also high in urban-Ichongu (38.6%). In addition, there are individuals who had used condoms regularly during intercourse, and there are also some individuals who have indulged in irregular usage of condoms in the past six months preceding the interviews. Those individuals are high in numbers in all the locations. Whereas Urban-Ichongu (74.1%) and rural-Ichongu (64.5%) have the highest numbers of individuals who did not use condoms regularly, rural-Ipusu has the highest number of individuals who use condoms regularly (28.5%; see Tables B12). Furthermore, those individuals who indulge in irregular usage of condoms during intercourse adduce reasons for doing so. Those who said condoms reduce sexual pleasure are high in numbers in urban-Ichongu (40.6%), rural-Ichongu (27.5%) and rural-Ipusu (20.5%). Whereas those who said they needed children for not using condoms predominate in rural-Ichongu (43.3%) and urban-Ipusu (40.9%), some in urban-Ipusu simply don't need condoms or had never used condoms (58.4%; see Table B13).

Table B12

Condom Breakage during Usage; Slip off During Usage; and Condoms Usage in the last Six Months; by Location of Respondents Residence

Location of Respondents Residence									
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total %				
	Ichongu		Ichongu						
	Condoms I	Breakage							
Yes	55.8%	25.8%	49.2%	46.0%	708 44.2				
No	21.0%	45.7%	34.0%	43.1%	576 36.0				
Never ever used	23.3%	28.5%	16.8%	10.9	317 19.8				
Total	400	396	394	411	1601				
%	100	100	100	100	100				
Condoms Slip Off During Intercourse									
Yes	26.3%	21.1%	38.6%	22.9%	399 24.9				
No	50.5%	59.3%	44.7%	66.2%	885 55.3				
Never ever used	23.3%	28.5%	16.8%	10.9%	317 19.8				
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Condoms usage in	the Last Six Mon	ths Preceding Int	erviews					
Did not use	5.0%	6.6%	6.9%	1.2%	78 4.9				
Used sometimes	64.5%	47.7%	74.1%	44.0%	920 57.5				
Used always	7.5%	17.2%	2.5%	43.3%	286 17.9				
Never ever used	23.0%	28.5%	16.5%	11.4%	317 19.8				
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Note. The source of data is field survey, 2014.

Table B13

Reasons for not using Condoms by Location of Residence

	Location	of Respondent	s Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
Reasons for not using						
Don't know where to get one	3.0%	10.4%	2.8%	0.7%	67	4.2
It is expensive	0.3%	2.0%	3.0%	1.7%	28	1.7
It reduces pleasure	27.5%	20.5%	40.6%	10.0%	392	24.5
Generally scarce	2.0%	4.5%	2.0%	5.1%	55	3.4
Need child	43.3%	38.9%	40.9%	20.0%	570	35.6
Never used or not needed	7.0%	14.9%	7.1%	58.4%	355	22.2
Others	17.0%	8.8%	3.6%	4.1%	134	8.4
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Note. The source of data is from field survey, 2014.

Alcohol consumption is more predominant in rural-Ichongu (50.5%) and urban-Ichongu (39.3%). Thus, having sex while drunk has followed similar pattern with more individuals who had sex while drunk are in rural-Ichongu (38.5%) and urban-Ichongu (25.6%). The common type of alcohol consumed in all the locations is Beer. Whereas urban-Ichongu is the location with the highest consumption of Beer, rural-Ichongu is the location with the highest consumption of Ogogoro. Those who drink three or more times a week are more in rural-Ichongu (46.6%) and urban-Ichongu (45.5%) than in the other locations (see Tables B14a). Apart from alcohol consumption, there are individuals who take drugs for sex. Amongst the drugs consumers, more are in rural-Ichongu (85.7%) and urban-Ichongu (82.1%) than the other locations. Whereas traditional mixtures are consumed more in rural-Ipusu (81.8%) and urban-Ichongu (71.4%), Cannabis is consumed in urban-Ipusu more than the other locations (see Table B14b).

Table B14a

1100101000000000000000000000000000000	Alcohol (<i>Consumption</i> ;	Sex while	Drunk:	Types o	f Alcohol, b	v Location o	f Residence
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Location of Respondents Residence								
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total %			
	Ichongu		Ichongu					
Alcohol consumption								
Yes	50.5%	37.6%	39.3%	27.7%	620 38.7			
No	49.5%	62.4%	60.7%	72.3%	981 61.3			
Total	400	396	394	411	1601			
%	100	100	100	100	100			
	Sex v	while Drunk						
Yes	38.5%	17.7%	25.6%	14.8%	386 24.1			
No	12.0%	19.9%	13.7%	12.9%	234 14.6			
Never ever Drunk	49.5%	62.4%	60.7%	72.3%	981 61.3			
Total	400	396	394	411	1601			
%	100	100	100	100	100			
	Types	of Alcohol Con	sumed					
Ogogoro	6.8%	5.8%	5.1%	0.7%	71 4.4			
Burukutuu	9.3%	3.3%	5.6%	1.7%	88 5.5			
Beer	14.8%	19.4%	20.1%	6.9%	292 18.2			
Palm wine	8.3%	7.6%	2.0%	5.1%	109 6.8			
Never used alcohol	49.5%	62.6%	60.7%	72.0%	981 61.3			
Others	11.5%	1.3%	1.8%	0.5%	60 3.7			
Total	400	396	394	411	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for alcohol consumers only.

TableB14b

Number of times Respondent Drink in a Week; Drugs Consumption; and Type of Drugs, by Location of Residence

	Location of Re	espondents Resid	ence					
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Tota	1 %		
	Ichongu		Ichongu					
	Number of tim	es Respondents	drink in a Week					
One time	23.3%	32.4%	23.1%	31.6%	167	26.9		
Two times	30.2%	33.8%	31.4%	28.9%	193	31.1		
Three times	23.3%	16.9%	22.4%	30.7%	142	22.9		
More than three times	23.3%	16.9%	23.1%	8.8%	118	19.0		
Total	202	148	156	114	620			
%	100	100	100	100	100			
Consumption of Drug for Sex								
Yes	85.7%	36.4%	82.1%	66.7%	53	75.7		
No	14.3%	63.6%	17.9%	33.3%	17	24.3		
Total	28	11	28	3	70			
%	100	100	100	100	100			
	Type of D	ugs Consumed						
Solution	7.1%	0.0%	17.9%	0.0%	7	10.0		
Cannabis	25.0%	18.2%	10.7%	33.3%	13	18.6		
Traditional mixture	64.3%	81.8%	71.4%	66.7%	49	70.0		
Others	3.6%	0.0%	0.0%	0.0%	1	19.0		
Total	28	11	28	3	70			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014. The total is less than 1601 because the question is for alcohol and drugs consumers only.

B4 HIV Variables by Location of Respondents Residence

Several individuals know someone living with HIV (more than 84%) in all the locations. The sero-prevalence rate of HIV amongst wives or husbands is 24.6% in urban-Ichongu while the rate is 20.4% in urban-Ipusu. Amongst friends, the sero-prevalence rate is 40.3% in rural-Ichongu and 41.4% in urban-Ipusu. During the last six months preceding the interviews, more people tested for HIV in rural-Ipusu (60.9%) and urban-Ipusu (58.4%) than in the other locations; and at least 60% of the individuals know at least two individuals living with HIV in all the locations (see Tables B15a and b).

Table B15a

Location of Respondents Residence						
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
Knowledge of someone						
Yes	91.2%	84.3%	100%	100%	1503	93.9
No	8.8%	15.7%	0.0%	0.0%	98	6.1
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Knowledge of someone with HIV by Location of Residence

Note. The source of data is from field survey, 2014.

Table B15b

Knowledge of and Test for HIV by Location of Residence

	Location of Respondents Residence							
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%		
	Ichongu		Ichongu					
	Relationship of t	he Respondents v	with HIV Patient					
Husband/wife	0.8%	1.3%	24.6%	20.4%	189) 11.8		
Brother	12.3%	8.6%	12.7%	10.5%	176	11.0		
Sister	15.8%	9.6%	16.5%	12.9%	219	13.7		
Friend	40.3%	23.5%	35.3%	41.4%	563	35.2		
Parents	2.5%	2.8%	2.3%	1.9%	38	2.4		
Children	0.0%	3.0%	1.8%	1.9%	27	1.7		
Others	20.8%	35.1%	6.9%	10.2%	291	18.2		
Don't know	7.8%	16.2%	0.0%	0.7%	98	6.1		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
	Test for HIV in	n the last Six Mor	ths Preceding Int	erviews				
Yes	43.3%	60.9%	38.8%	58.4%	807	50.4		
No	56.7%	39.1%	61.2%	41.6%	794	49.6		
Total	400	396	394	411	1601			
%	100	100	100	100	100			
	Knowledge of	of Number of Per	sons with HIV					
One	6.0%	9.3%	3.8%	1.9%	76	5.1		
Two	16.3%	31.3%	7.1%	10.0%	233	15.5		
Three	77.7%	59.3%	89.1%	88.1%	1194	79.4		
Total	367	332	393	411	1503			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014. The total is less than 1601in the case of number of persons with HIV because the question is for those with knowledge of someone living with HIV only.

Some of the respondents have indicated that they know someone who had died of HIV/AIDS. Approximately seventy eight percent of those in urban-Ichongu and 71.8% in urban-Ipusu know at least two or three individuals who have died of AIDS. With regard to partner's HIV status, 69.8% of those in urban-Ichongu said their partners are HIV positive, while the rate is

58.6% in urban-Ipusu. Thirty five percent of the respondents in rural-Ipusu don't know their partner's HIV status (see Tables B16).

Table B16

Respondents' knowledge of Number of Persons who died of HIV; and Partners' HIV Status; by Location of Residence

	Locati	on of Responden	ts Residence			
	Rural-	Rural-Ipusu	Urban-	Urban-Ipusu	Total	%
	Ichongu		Ichongu			
Number of persons died						
One	19.3%	29.7%	8.9%	11.9%	249	16.8
Two	18.2%	23.5%	13.5%	16.3%	261	17.6
Three	62.6%	47.6%	77.6%	71.8%	974	65.6
Total	358	323	392	411	1484	
%	100	100	100	100	100	
	Partners' HIV S	tatus				
positive	0.5%	0.8%	69.8%	58.6%	521	32.5
Negative	64.3%	67.7%	14.7%	25.1%	686	42.8
Don't know	35.3%	31.6%	15.5%	16.3%	394	24.6
Total	400	396	394	411	1601	
%	100	100	100	100	100	

Note. The source of data is from field survey, 2014. The total is less than 1601 in the case of number of persons who died of HIV because the question is for those with the knowledge of someone living with HIV only.

Over 80% of the respondents in each of the location have agreed that several people are living with HIV, while at least 70% of respondents have identified correctly that unprotected sex with HIV infected individual can transmit the infection. They have also identified sharing of infected Syringes and Needles, and blood transfusion as other sources through which HIV can be transmitted. However, 3.8% of the respondents in rural-Ipusu don't know the sources of spread of HIV (see Tables B17a).

Several respondents have expressed that they are satisfied with their current sexual relationship. Approximately 63% of the individuals in rural-Ipusu said they are satisfied with their relationship, while the satisfaction rate is 68.3% in urban-Ichongu. Approximately 34% of respondents are highly satisfied with their relationship in urban-Ipusu (see Table B17b).

Table B17a

Knowledge of whether several People are infected with HIV, and Sources of Spread of HIV

by Location of Residence

Location of Respondents Residence									
	Rural-Chonju	Rural-Ipas	Urban-	Urban-Ipas	Total %				
			Chonju						
Knowledge of infections									
Strongly disagree	1.3%	1.5%	1.3%	2.4%	26 1.6				
Disagree	9.3%	10.6%	1.8%	1.9%	94 5.9				
Agree	52.3%	35.4%	50.8%	52.3%	764 47.7				
Strongly agree	37.3%	52.5%	46.2%	43.3%	717 44.8				
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Knowledge of sour	rces of Spread	of HIV						
Unprotected casual sex	77.3%	54.8%	84.5%	76.4%	117 73.3				
Blood transfusion	1.8%	12.6%	8.4%	11.9%	139 8.7				
Sharing syringes or needles	3.0%	5.6%	3.3%	8.0%	80 5.0				
Others	16.0%	23.2%	2.0%	1.9%	172 10.7				
Don't know	2.0%	3.8%	1.8%	1.7%	37 2.3				
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014.

Table B17b

Sexual Webs HIV Status; and Satisfaction with Current Relationship; by Location of

Residence

Location of Respondents Residence									
	Rural-Chonju	Rural-Ipas	Urban-	Urban-Ipusu	-Ipusu Total				
			Chonju						
Sexual Webs HIV Status									
Negative/Don't know	35.3%	31.6%	0.0%	0.0%	266	16.6			
Both Negative	64.3%	67.7%	0.0%	0.0%	525	32.8			
Positive/Don't know	0.0%	0.0%	15.5%	16.3%	128	8.0			
Positive/Negative	0.5%	0.8%	14.7%	25.1%	166	10.4			
Both positive	0.0%	0.0%	69.8%	58.6%	516	32.2			
Total	400	396	394	411	1601				
%	100	100	100	100	100				
	Satisfaction with	n the Current re	elationship						
Not satisfied	9.5%	4.0%	6.1%	3.4%	92	5.7			
Somewhat satisfied	33.0%	14.1%	12.9%	8.0%	272	17.0			
Satisfied	48.3%	62.9%	68.3%	54.5%	935	58.4			
Highly satisfied	9.3%	18.9%	12.7%	34.1%	302	18.9			
Total	400	396	394	411	1601				
%	100	100	100	100	100				

Note. The source of data is from field survey, 2014.

B5 Summary

The distribution of sexual capacity, sexual motivation, sexual performance, HIV and sexual webs variables vary across the locations. It has been ascertained that: (1) there are more females in the sample in each of the locations except in rural-Ichongu, where there are more men than women (2) there are younger individuals below the age of 35 years than the older ones in all the location (3) there are more married individuals than other relationship statuses in all the locations (4) there are more individuals without formal education and primary education in rural-Ichongu than the other locations (5) urban-Ichongu has more individuals with higher education and income than the other locations (6) the Catholic are predominantly in rural-Ichongu, while the Protestant and Pentecostal predominate in urban-Ipusu and urban-Ichongu respectively (7) there are more individuals who keep more than one sexual partner in urban-Ichongu and urban-Ipusu than in the other locations (8) more individuals have experienced condoms breakage and slip off in rura-Ichongu and urban-Ichongu than in the other locations (9) more individuals have indulged in irregular usage of condoms in urban-Ichongu and rural-Ichongu than in the other locations (10) more individuals have had sex while drunk or had taken drugs in urban-Ichongu and rural-Ichongu than in the other locations (11) over 70% of the respondents in each of the locations have identified correctly some of the common ways through which HIV can be transmitted (12) urban-Ichongu has the highest number of partners who are HIV positive status (13) at least 60% of the respondents in each of the location said they are satisfied with their current relationship.

APPENDIX C

HIV Status and Sexual capacity, Sexual motivation, Sexual performance, HIV, and Sexual webs Variables

C1.1 Introduction

Though the focus of this study is on the partners rather than the individuals, nevertheless, this section will examine the distribution of the sexual capacity, sexual motivation, sexual performance, HIV, and sexual webs variables by HIV status. Whereas the sexual webs HIV status refers to the HIV status of partners, the HIV status refers to the individual's HIV status. The combined HIV statuses of two individuals or more forms the sexual webs HIV status. Despite the fact that the analysis is going to be at the individual level, this section can be relevant for providing explanation on certain observations made from the data, especially if reference is to be made to the individual rather the partners.

C1.2 HIV Status and Sexual Capacity Variable

This sub-section will examine HIV status and individual, family, and structural factors

C1.2.1 HIV Status and Individual Variables

Those who are living with HIV are from urban-Ipusu and urban-Ichongu; while those who are sero-negative or HIV negative are from rural-Ipusu and rural-Ichongu The distribution of HIV status by sex, shows that 50.7% of those who are living with HIV are women, while 49.8% are male. Conversely, males who are HIV sero-negative status are 50.2% while the women are 49.3%. Amongst those living with HIV, the age groups between 50 and 60+ years have HIV sero-prevalence rate of above 65%, while the lowest rates are amongst the age groups between 18 and 24years with sero-prevalence rate of between 30-38%. Conversely, the younger ages have the highest percentages of sero-negative rates (61-69.9%). It can be suggested that, the high sero-prevalence rate of HIV amongst the older age groups could be as a result of exposure to risk in multiple partnership in marriage and co-habitation relationships, more especially, where there are many open positive sexual webs. The highest sero-prevalence rates of HIV are amongst the single (40.0%). Those who are single also have the highest percentages of sero-negative individuals (60.0%; see Tables C1, 2, 3 and 4).

Table C1

Location of Respondents' Residence							
	Urban- Ipusu	Urban- Ichongu	Rural- Ipusu	Rural- Ichongu	Total	%	
HIV Status							
Positive	100%	100%	0.0%	0.0%	805	50.3	
Negative	0.0%	0.0%	100%	100%	796	49.7	
Total	411	394	396	400	1601		
%	100	100	100	100	100		

Respondents HIV Status by Location of Residence

Note. The source of data is from field survey, 2014

Table C2

Respondents HIV Status by Sex of Respondents

	Sex of th	e Respondents		
	Male	Female	Total	%
HIV Status				
Positive	49.8%	50.7%	805	50.3
Negative	50.2%	49.3%	796	49.7
Total	749	852	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table C3

Respondents HIV Status by Age of Respondents

	Age of Respondents (interval in years)							
	18-19yrs	20-24yrs	25-29yrs	30-34yrs	35-39yrs	40-44yrs		
HIV Status								
Positive	30.1%	38.6%	51.5%	56.0%	61.7%	54.4%		
Negative	69.9%	61.4%	48.5%	44.0%	38.3%	45.6%		
Total	163	293	342	336	120	136		
%	100	100	100	100	100	100		
	Age of Respondents Continued							
	45-49yrs	50-54yrs	55-59yrs	60+	Total	%		
Positive	53.1%	70.1%	65.7%	81.8%	805	50.3		
Negative	46.9%	29.9%	34.3%	18.2%	796	49.7		
Total	98	67	35	11	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014
Relationship Status								
	Married	Single	widowed	Divorced	Separated	Cohabiting	Total	%
HIV Status								
Positive	54.1%	40.0%	54.5%	59.3%	66.2%	71.4%	805	50.3
Negative	45.9%	60.0%	45.5%	40.7%	33.8%	28.6%	796	49.7
Total	820	527	123	59	65	7	1601	
%	100	100	100	100	100	100	100	

Respondents HIV Status by Relationship Status

Note. The source of data is from field survey, 2014

By educational attainment, those with tertiary education are less likely to be living with HIV (49.8%), while those with primary education more likely to be HIV positive status (51.6%). Again, those with tertiary education more likely to be HIV negative status (50.2%), while those with primary education are less likely to be HIV negative status (48.4%). Similarly, primary partners living with HIV are more likely to have primary education (55.0%) while partners who are HIV sero-negative status are more likely to acquire secondary education (51.9%).

With regard to occupation, the people living with HIV are more likely to be in business (66.4%), while partners who are students are more likely to be HIV sero-negative status (68.9%). This observation where partners who are in business have high seroprevalence rate of HIV is largely due to the fact that, those reporting business as occupation are mostly petty traders, or those who are temporary in petty business pending when something better will be available, especially amongst the unemployed. Relatively, primary partners who are living with HIV are more likely to be in business (65.9%) while those who are students are more likely to be sero-negative HIV status (78.8%). The sero-prevalence rates are quite high amongst civil servant (56.9%) and farmers (48.9% see Table C2). As it has been indicated elsewhere that the HIV epidemic in the study area is a generalised one; it is not therefore strange to observe high sero-prevalence rate of HIV amongst the highest income group (83.3%), while those with income less than N25, 000 (less than AUD 170) are more likely to be HIV sero-negative status (52%; see Tables C5, 6, and 7)

By religion, those who are practicing the traditional religion are more likely to be HIV positive status (60%), while the Muslims are less likely to be HIV sero-negative status (58.3%). It seems, not regularly attending religious activities is associated with high sero-

prevalence rates of HIV. Those who have strongly disagreed attending their religious activities regularly are more likely to be HIV positive status (70.2%) while those who have disagreed with the statement that they attend religious activities regularly are more likely to be HIV sero-negative (55.2%). Regarding religious organisation, the Pentecostal (62.4%), and Traditionalist (58.3%) are more likely to be HIV positive status, while the Muslims are more likely to be HIV sero-negative status (58.3%). Apart from belonging to a religious organisation, the respondents indicated whether they were or are currently in leadership position. Those who agreed that they are leaders in their religious organisations are more likely to be HIV positive status (58%) while those who have disagreed that they are leaders are more likely to be HIV sero-negative (57% ; see Tables C8, 9 and 10)

Table C5

Respondents' Educational Attainment									
	No schooling	Primary	Secondary	Tertiary	Total	%			
HIV Status									
Positive	50.0%	51.6%	50.3%	49.8%	805	50.3			
Negative	50.0%	48.4%	49.7%	50.2%	796	49.7			
Total	122	188	761	530	1601				
%	100	100	100	100	100	100			
		Partners' I	Educational Att	tainment					
Positive	54.7%	55.0%	48.1%	50.0%	805	50.3			
Negative	45.3%	45.0%	51.9%	50.0%	796	49.7			
Total	137	209	759	496	1601				
%	100	100	100	100	100				

HIV Status by Respondents, and Partners' Educational Attainment

Occupation of Respondents								
-	Farming	Civil	Business	Students	Unemployment	Others	Total	%
HIV Status		servant						
Desitive	49.20/	(2.10)	66 10/	21 10/	45 70/	60 50/	90 <i>5</i>	50.2
Positive	48.3%	02.1%	00.4%	31.1%	45.7%	00.5%	805	50.5
Negative	51.%	37.9%	33.6%	68.9%	54.3%	39.5%	796	49.7
Total	451	203	363	366	175	43	1601	
%	100	100	100	100	100	100	100	
			Primary Pa	rtners' main	Occupation			
Positive	48.9%	56.9%	65.9%	26.2%	47.6%	58.6%	805	50.3
Negative	51.1%	43.1%	34.1%	73.8%	52.4%	41.4%	796	49.7
Total	468	235	393	290	168	29	1601	
%	100	100	100	100	100	100	100	

HIV Status by Respondents, and Primary Partners' main Occupation

Note. The source of data is from field survey, 2014

Table C7

HIV Status by Income of Respondents (Naira)

Income of the Respondents in Naira							
	<25,000	25,000- 4900	500,000- 99,000	100,000+	Total	%	
HIV Status							
Positive	48.0%	55.1%	54.1%	83.3%	805	50.3	
Negative	52.0%	44.9%	45.9%	16.7%	796	49.7	
Total	1186	287	98	30	1601		
%	100	100	100	100	100		

HIV Status by Religion	of the Respondents	, and by Regular	Attendance of	Religious
Activities				

Respondents Religious Affiliation								
	Christianity	Islam	Traditional	Others	Total	%		
HIV Status								
Positive	50.0%	41.7%	60.0%	50.0%	805	50.3		
Negative	50.0%	58.3%	40.0%	50.0%	796	49.7		
Total	1503	24	70	4	1601			
%	100	100	100	100	100			
		Attendance of	Religious Act	ivities				
	Strongly disagree	Disagree	Agree	Strongly disagree	Total	%		
Positive	70.2%	44.8%	50.1%	52.0%	805	50.3		
Negative	29.8%	55.2%	49.9%	48.0%	244	49.7		
Total	104	415	857	225	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014

Table C9

HIV Status by Respondents' Religious Organisation

Respondents' Religious Organisation								
	Catholic	Protestant	Pentecostal	Islam	Traditional	Others	Total	%
HIV Status								
Positive	45.1%	54.9%	62.4%	41.7%	60.0%	50.0%	805	50.3
Negative	54.9%	45.1%	37.6%	58.3%	40.0%	50.0%	976	49.7
Total	879	459	165	24	70	4	1601	
%	100	100	100	100	100	100	100	

Note. The source of data is from field survey, 2014

Table C10

HIV Status by whether a Leader in Religious Organisation

	Whether a Lea	der in Religious	Organisation		
	Strongly	Disagree	Agree	Strongly	Total %
	disagree			agree	
HIV Status					
Positive	51.7%	43.0%	58.0%	53.8%	805 50.3
Negative	48.3%	57.0%	42.0%	46.2%	796 49.7
Total	180	709	567	145	1601
%	100	100	100	100	100

C1.2.2 HIV Status and Family Variables

With regard to the types of family individuals have come from, sexual partners from single family have highest HIV sero-prevalence rate (68.3%) while those from monogamous family are more likely to be HIV sero-negative. Similarly, those who reported that they don't receive support of any kind from the family members have high HIV sero-prevalence rates (59.9%), while those who received monetary support from family members are more likely to be HIV sero-negative status (55.4%; see Tables C11).

Table C11

HIV Status by Type of Family the Respondents Come From; and Type of Support from Family Members

Type of Family the Respondents Come From								
	Monogamous	Polygamous	Single	Others	Total	%		
HIV Status								
Positive	47.5%	51.3%	68.3%	0.0%	805	50.3		
Negative	52.5%	48.7%	31.7%	100%	796	49.7		
Total	760	757	82	2	1601			
%	100	100	100	100	100			
Type of Support from Family Members								
	Money	Material	Material &	No support				
			money					
Positive	44.6%	45.6%	49.4%	59.9%	805	50.3		
Negative	55.4%	54.4%	50.6%	40.1%	796	49.7		
Total	731	237	77	556	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014

C1.2.3 HIV Status and Structural Factors

Structural factors contribute to the distribution of HIV Status in the population. The individuals whose sexual relationships are guided by court laws are more likely to be HIV positive status (55.6%), while those whose relationships are guided by personal convictions (others) are more likely to be HIV sero-negative status (53.5%;)

With regard to the influence of Nollywood films on sexual behaviours, those who have strongly disagreed that Nollywood films influence sexual behaviours are more likely to report HIV positive status (58%) while those who disagreed that Nollywood films influence sexual behaviours are more likely to be HIV sero-negative Status (67.9%). Furthermore, those who have disagreed with the statement that, drinking places influence sexual behaviours have high prevalence rates of HIV (55.5%) while those who have agreed that drinking places influence sexual behaviours are more likely to report HIV sero-negative status (51.6%). Again, those

who have agreed that hotels influence illicit sex are more likely to report HIV positive status, while those who have disagreed that hotels influence illicit sex are more likely to report HIV sero-negative status (see Tables C12 and 13)

Table C12

HIV Status by Types of Laws Guiding Sexual Relationship, and by Nollywood Influence on Illicit Sex

Laws Guiding Sexual Relationship								
	Religious laws	Customary	Court laws	Others	Total %			
		laws						
HIV Status								
Positive	49.1%	53.2%	55.6%	46.5%	805 50.3			
Negative	50.9%	46.8%	44.4%	53.5%	796 49.7			
Total	780	568	27	226	1601			
%	100	100	100	100	100			
	Nollywood Film	n Influence on	Illicit Sex					
	Strongly disagree	Disagree	Agree	Strongly agree	Total %			
Positive	58.0%	32.1%	53.8%	52.8%	805 50.3			
Negative	42.0%	67.9%	46.2%	47.2%	796 49.7			
Total	81	252	781	487	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014

Table C13

HIV Status by Drinking Joints Influence on Illicit Sex, and by Hotel Influence on Illicit Sex

Influence of Drinking Joint on Illicit Sex								
	Strongly	Disagree	Agree	Strongly	Total	%		
	disagree			agree				
HIV Status								
Positive	50.0%	55.5%	48.4%	51.5%	805	50.3		
Negative	50.0%	44.5	51.6%	48.5%	796	49.7		
Total	54	164	806	577	1601			
%	100	100	100	100	100			
	Hotel I	nfluence on Illici	it Sex					
Positive	53.3%	26.3%	55.9%	47.9%	805	50.3		
Negative	46.7%	73.7%	44.1%	52.1%	796	49.7		
Total	60	156	849	536	1601			
%	100	100	100	100	100			

Note. The source of data is from field survey, 2014

C1.3 HIV Status and Sexual Motivation Variables

The individuals who have accepted that they were motivated by love to be in sexual relationships are more likely to report HIV positive status (55.3%) while those who have disagreed that they were motivated by love to be in sexual relationships are more likely to report HIV sero-negative Status (58.9%; see Table C14a). Other respondents indicated that

they needed money as a reason for engaging in sexual relationship. Those who strongly disagreed that money propelled them to enter into relationship are more likely to report HIV positive status (58.8%), while those who strongly agreed that money was behind sexual relationship are more likely to report sero-negative HIV status (55.1%; see Table C14a). Similarly, those who have accepted that the desire for children had motivated them to enter into relationship are more likely to be HIV positive status (60.7%), while those who strongly agreed that they had been motivated by the need for children to engage in sexual relationships are more likely to be HIV sero-negative status (65.1%; see Table C14a). Pleasure was also identified as a motivation factor for sexual relationships. Those who strongly disagreed that pleasure was responsible for their relationship are more likely to be HIV positive status (61%) while those who strongly agreed that pleasure played a role in their relationship are more likely to be HIV sero-negative status (67.3%;). Another motivation factor for sexual relationships is the need for place to live. Those who have accepted that they entered into relationship to get a place to live, are more likely to be HIV positive status (64.9%), while those who disagreed that they were influenced by the need for a place to live to enter in to relationship are more likely to be HIV sero-negative status (59.8%; see Table C14b)

The quest for favours motivates individuals to negotiate for sexual relationship, those who have strongly agreed that favours motivated their relationship are more likely to be HIV positive status (57.1%), while those who have strongly disagreed with the statement are more likely to report HIV sero-negative status (66.7%; see Table C14b). There are instances where a partner, for one reason or the other would stay away from his or her primary partner. The observation indicates that sero-prevalence HIV rate is higher amongst those who have reported staying away from their partners up to one year or more (62.4%), while those had stay away for a period of six but less than nine months are more likely to be HIV sero-negative status (60.7%; see Table C15).

With regard to assistance received from partners, those who have reported that they received assistance from partners are more likely to report HIV positive status (50.8%), while those have not received any assistance are more likely to be HIV sero-negative status (50.9%; see Table C16). Several individuals have entered into sexual relationships due to the desire to have children; those who have two children with their primary partner are more likely to be HIV sero-negative status (59.3%), while those without a child are more likely to be HIV sero-negative status (55.8%). Similarly, those who have two children with other partners are more

likely to report HIV positive status (65.3%), while those without children with other sexual partners are more likely to be HIV sero-negative status (48.6%; see Table C17).

Table C14a

HIV Status by motivations for Sexual Relationship (Love), Need Money, and Desire for Children;

Motivations for Sexual Relationship (Love)							
	Strongly	Disagree	Agree	Strongly	Total %		
	disagree			disagree			
HIV Status							
Positive	43.9%	44.9%	55.3%	41.1%	805 50.3		
Negative	56.1%	55.1%	44.7%	58.9%	796 49.7		
Total	57	118	982	444	1601		
%	100	100	100	100	100		
Need Money							
Positive	58.8%	45.8%	52.7%	44.9%	805 50.3		
Negative	41.2%	54.2%	47.3%	55.1%	796 49.7		
Total	291	671	512	127	1601		
%	100	100	100	100	100		
	Desire	e for Children					
Positive	48.0%	49.0%	60.7%	34.9%	805 50.3		
Negative	52.0%	51.0%	39.3%	65.1%	796 49.7		
Total	100	335	722	444	1601		
%	100	100	100	100	100		

Note. The source of data is from field survey, 2014

Table C14b

HIV Status by motivations for Sexual Relationship (Desire for pleasure); Place to Live; and

desire for Favour

Motivations for Sexual Relationship (Pleasure)								
	Strongly	Disagree	Agree	Strongly	Total	%		
	disagree			disagree				
	Desire t	for Pleasure						
Positive	61.0%	55.9%	53.9%	32.7%	805	50.3		
Negative	39.0%	44.1%	46.1%	67.3%	796	49.7		
Total	136	438	666	361	1601			
%	100	100	100	100	100			
	Place to	o Live						
Positive	50.2%	40.2%	64.9%	57.8%	805	50.3		
Negative	49.8%	59.8%	35.1%	42.2%	796	49.7		
Total	331	719	442	109	1601			
%	100	100	100	100	100			
	Desire f	or Favours						
Positive	57.1%	48.7%	52.6%	33.3%	805	50.3		
Negative	42.9%	51.3%	47.4%	66.7%	796	49.7		
Total	301	499	639	162	1601			
%	100	100	100	100	100			

	Period of Time away from Partner							
	Less than 3months	3 months or more but less than six	6 months or more but less than 9	9 months of more but less than 1yr	1 year or more	Total	%	
HIV status								
Positive	57.5%	36.8%	39.3%	43.3%	62.4%	805	50.3	
Negative	42.5%	63.2%	60.7%	56.7%	37.6%	796	49.7	
Total	871	418	107	104	101	1601		
%	100	100	100	100	100	100		

HIV Status by Duration without Primary Partner

Note. The source of data is from field survey, 2014

Table C16

HIV Status by Receipt of Partner's Assistance

	Yes	No	Total	%
HIV Status				
Positive	50.8%	49.1%	805	50.3
Negative	49.2%	50.9%	796	49.7
Total	1126	475	1601	
%	100	100	100	

Note. The source of data is from field survey, 2014

Table C17

HIV Status by Number of children with Primary, and other Partners

	Number of Children with Primary Sexual Partners								
	No child	One	Two	More than 2	Total	%			
HIV status									
Positive	44.2%	55.1%	59.3%	52.8%	805	50.3			
Negative	55.8%	44.9%	40.7%	47.2%	796	49.7			
Total	762	263	290	286	1601				
%	100	100	100	100	100				
		Number of	f Children with	Other Partners					
Positive	51.4%	60.4%	65.3%	63.2%	708	50.3			
Negative	48.6%	39.6%	34.7%	36.8%	583	49.7			
Total	925	149	124	114	1312				
%	100	100	100	100	100				

C1.4 HIV Status and Performance Variables

Regarding type of sexual relationships, bisexual individuals are more likely to be HIV positive status (62.1%; see Table 18). Whereas those who had ever used condoms are more likely to be HIV positive status (54%), those who had never used condoms are more likely to be HIV sero-negative status (65%). The individuals who reported that they use male condoms have sero-prevalence HIV rates of 54 %(see Table C19). Whereas those who have reported that they use of Gold Circle brand of condoms are more likely to be HIV positive status (56.4%), those utilising Rough Rider are more likely to be HIV sero-negative status (57.7%; see Table C20).

The individuals who have chosen condoms brand based on other influences such as the partners' influence are more likely to report HIV positive status (53.3%), while those who have chosen brand based on been cheap are more likely to be HIV sero-negative status (78.7%; see Table C21). Some of the respondents experienced condoms breakage during usage; it has been observed that those who had experienced condoms breakage during use are more likely to be HIV positive status (54.1%; see Table C22), while those who had never used condoms are likely to be HIV sero-negative status (65%). Similarly, those who had experienced condoms slip off during use are more likely to report HIV positive status (61.7%; see Table C22), while those who had never used condoms are more likely to be HIV sero-negative status (65%). Furthermore, those who had always used condoms in the last six months preceding the interviews are more likely to report HIV positive status (65.7%), while those who had never used condoms are more likely to be HIV sero-negative status (64.7%; see Tables C23). By reasons for why the respondents did not use condoms during sexual intercourse in the last six months preceding the interviews indicate that, those who said condoms was not needed are more likely to be HIV positive status (75.5%), while those who did not use condoms because partner objected to its usage, or condoms cause irritation are more likely to be HIV sero-negative (76.7%; see Table C24).

Types of Sexual Relationship								
	Heterosexual	Bisexual	Lesbian	Homosexual	Total %			
HIV Status								
Positive	50.2%	62.1%	50.0%	0.0%	805 50.3			
Negative	49.8%	37.9%	50.0%	100%	796 49.7			
Total	1566	29	2	4	1601			
%	100	100	100	100	100			

HIV Status by Types of Sexual Relationship

Note. The source of data is from field survey, 2014

Table C19

HIV Status by Ever used Condoms, and Type of Condoms Used

	Ever used Condoms									
Yes No Total %										
HIV status										
Positive	54.0%	35.0%	805	50.3						
Negative	46.0%	65.0%	796	49.7						
Total	1284	317	1601							
%	100	100	100							
	Types of Condoms	s used by Respond	lents							
	Male	Female	Total	%						
Positive	54.0%	66.7%	694	54.0						
Negative	46.0%	33.3	590	46.0						
Total	1278	6	1284							
%	100	100	100							

Note. The source of data is from field survey, 2014

Table C20

HIV Status by Condoms Brand Utilised by Respondents

Choice of Condoms Brand by Respondents									
	Gold circle	Rough rider	Lifestyle	Fantasy	Others	Total	%		
HIV Status									
Positive	56.4%	42.3%	47.7%	45.0%	47.1%	694	54.0		
Negative	43.6%	57.7%	52.3%	55.0%	52.9%	590	46.0		
Total	1026	123	44	40	51	1284			
%	100	100	100	100	100	100			

Reasons for Choice of Condoms Brand									
	Availability	Cheap	Pleasure	Quality	Others	Total	%		
HIV status									
Positive	45.6%	21.3%	41.8%	50.6%	53.3%	481	45.5		
Negative	54.4%	78.7%	58.2%	49.4%	46.7%	575	54.5		
Total	529	61	110	326	30	1056			
%	100	100	100	100	100	100			

HIV Status by Reasons for Choice of Condoms Brand

Note. The source of data is from field survey, 2014. The total is less than 1601 because of choice of condoms brand is for those who make use of condoms only.

Table C22

HIV Status by Condoms Breakage during Usage, and Condoms Slip off during Usage

Condoms Breakage during Usage								
Yes No Never used Total %								
HIV status					<u> </u>			
Positive	54.1%	54.0%	35.0%	805	50.3			
Negative	45.9%	46.0%	65.0%	796	49.7			
Total	708	576	317	1601				
%	100	100	100	100				
	Condoms	Slip off during U	sage					
Positive	61.7%	50.6%	35.0%	805	50.3			
Negative	38.3%	49.4%	65.0%	796	49.7			
Total	399	885	317	1601				
%	100	100	100	100				

Note. The source of data is from field survey, 2014.

Table C23

HIV Status by Condoms Usage in Last Six Months Preceding Interviews

Condoms Usage in the last Six Months								
	Did not use	Used sometimes	Used always	Never used	Total %			
HIV status								
Positive	41.0%	51.4%	65.7%	35.3%	805 50.3			
Negative	59.0%	48.6%	34.3%	64.7%	796 49.7			
Total	78	920	286	317	1601			
%	100	100	100	100	100			

	Reasons for not using Condoms								
	Don't know where to get it	It is expensive	Reduce pleasure	Generally scare	Need children	Not heard or needed	Others	Total	%
HIV status									
Positive	20.9%	67.9%	51.3%	52.7%	42.6%	75.5%	23.1%	805	50.3
Negative	79.1%	32.1%	48.7%	47.3%	57.4%	24.5%	76.9%	796	49.7
Total	67	28	392	55	570	355	134	1601	
%	100	100	100	100	100	100	100	100	

HIV Status by Reasons for not Using Condoms

Note. The source of data is from field survey, 2014.

Some of the respondents take alcohol in order to have sex, the sero-prevalence HIV rate amongst those who reported that they drink alcohol is 43.4%; while the sero-prevalence rate amongst those who had sex while drunk is 42%, and for those who don't drink alcohol, the rate is 54.6% (see Tables C25 and 26). The sero-prevalence rates of HIV amongst those that drink Beer is 53.4%, Burukutuu 43.2%, while for those that don't drink alcohol, the rate is 54.5% (see Table C27). Information was not only collected on the types of alcohol consumed by the respondents, they reported on the numbers of time they drink in a week. The sero-prevalence rate of HIV amongst those who drink two times a week is 42.5%, while amongst those who drink 3 times a week, the rate is 49.4% (see Table C28). Amongst those using drugs, the sero-prevalence rate of HIV is 43.3%, while the rate is 50.6% amongst non-users of drugs (see Table 29).

Similarly, the sero-prevalence rate of HIV is 71.4% amongst those who have reported that they consume Solution, while those who have reported that they consume Cannabis, the rate is 69.2%. Furthermore, those who consume drugs in order to have sex are more likely to be HIV positive status (47.2%), while those who don't consume drugs are more likely to be HIV sero-negative status (see Tables C30). The respondents who have been in relationship with their partners for over 5 years have high sero-prevalence rates of HIV (55.5%), while those who have stayed with their partners for over one year, but less than 5 years are more likely to be HIV sero-negative status (54.9%). Furthermore, the men who reported that they have more than two wives are more likely to be HIV positive status (59.2%), while those who have one wife are more likely to be HIV sero-negative status (75.4%; see Table C31). Again, the sero-prevalence rate of HIV amongst males who are keeping secret sexual relationship is

53.9%, while those who don't have secret relationships are more likely to be HIV seronegative status (51.9%). For the females, those who are keeping secret sexual partners have HIV sero-prevalence rate of 46%, while the rate is 52.2% amongst those who don't have secret sexual relationships (see Table C32).

Table C25

HIV Status by Alcohol Consumption

Consumption of Alcohol						
	Yes	No	Total	%		
HIV status						
Positive	43.4%	54.6%	805	50.3		
Negative	56.6%	45.4%	796	49.7		
Total	620	981	1601			
%	100	100	100			

Note. The source of data is from field survey, 2014. .

Table C26

HIV Status by Sex while Drunk

Sex while Drunk					
	Yes	No	Never drank	Total	%
HIV status					
Positive	42.0%	45.7%	54.6%	805	50.3
Negative	58.0%	54.3	45.4%	796	49.7
Total	386	234	981	1601	
%	100	100	100	100	

Note. The source of data is from field survey, 2014.

Table C27

HIV Status by Types of Alcohol Consumed by Respondents

Type of Alcohol Consumed by Respondents								
	Ogogoro	Burukutuu	Beer	Palm wine	Others	Never drank	Total	%
HIV status								
Positive	29.6%	43.2%	53.4%	42.2%	15.0%	54.5%	805	50.3
Negative	70.4%	54.8%	46.6%	57.8%	85.0%	45.5%	796	49.7
Total	71	88	292	109	60	981	1601	
%	100	100	100	100	100	100	100	

Number of Times Respondents Drink in a Week							
	1 time	2 times	3 times	More than 3 times	Total	%	
HIV status							
Positive	43.1%	42.5%	49.35%	39.0%	270	43.5	
Negative	56.9%	57.5%	50.7%	61.0%	350	56.5	
Total	167	193	142	118	620		
%	100	100	100	100	100		

HIV Status by Number of times Respondents Drink in a Week

Note. The source of data is from field survey, 2014. The total is less than 1601 for the number times respondents drink in a week because only alcohol consumers responded to the question.

Table C29

HIV Status by Drug Usage, and Taken Drugs for Sex

Drug Usage					
	Yes	No	Total	%	
HIV status					
Positive	44.3%	50.6%	805	50.3	
Negative	55.7%	49.4%	796	49.7	
Total	70	1531	1601		
%	100	100	100		
	Taken	Drugs for Sex			
Positive	47.2%	35.3%	31	50.3	
Negative	52.8%	64.7	39	49.7	
Total	53	17	70		
%	100	100	100		

Note. The source of data is from field survey, 2014. Total less than 1601 for questions on drugs because the questions are for drug users only

Types of Drugs taken by Respondents						
	Solution	Cannabis	Traditional	Others	Total	%
HIV status						
Positive	71.4%	30.8%	44.9%	0.0%	31	44.3
Negative	28.6%	69.2%	55.1%	100%	39	55.7
Total	7	13	49	1	70	
%	100	100	100	100	100	

HIV Status by Type of Drug Taken By Respondents;

Note. The source of data is from field survey, 2014. Total less than 1601 for questions on drugs because the questions are for drug users only.

Table C31

HIV Status by Age of Relationship and Number of Wives

Age of Relationship (Years)							
	Less than 1yr Over 1 but Over 5yrs Total less than 5yrs						
HIV status							
Positive	52.1%	45.1%	55.5%	805	50.3		
Negative	47.9%	54.9%	44.5%	976	49.7		
Total	334	692	575	1601			
%	100	100	100	100			
	١	Number of Wives					
	One	Two	More than 2	Total	%		
Positive	24.6%	55.0%	59.2%	430	50.5		
Negative	75.4%	45.0%	40.8%	421	49.5		
Total	142	590	120	852			
%	100	100	100	100			

Note. The source of data is from field survey, 2014. Total less than 1601 for questions on number of wives because only females responded to the question.

	Knowledge of Partners' Secret Sexual Relationship (Female Respondents)					
	Yes	No	Total	%		
HIV status						
Positive	53.9%	48.1%	430	50.5		
Negative	46.1%	51.9%	421	49.1		
Total	360	492	852			
%	100	100	100			
	Knowledge of F Relationship (Mal	Partners' Secret Se e Respondents)	exual			
Positive	46.0%	52.2%	375	50.0		
Negative	54.0%	47.8%	374	50.0		
Total	264	485	749			
%	100	100	100			

HIV Status by Knowledge of Partners' Secret Sexual Relationship (Female Respondents); and Knowledge of Partners' Secret Sexual Relationship (Male Respondents)

Note. The source of data is from field survey, 2014. Total less than 1601 for knowledge of secret relationship because it has been separated by sex.

C1.5 HIV Status and HIV Variables

The HIV sero-prevalence rate amongst those who have known their partner's HIV status is 56.1%, while those who don't know their partner's HIV status have HIV sero-prevalence rate of 32.5%. Furthermore, the sero-prevalence rate of HIV amongst those who have reported that their partners are HIV positive is 99%, while for those who reported that they don't know their partner's HIV status, the sero-prevalence rate is 32.5%, and for those who reported that their partners are HIV sero-negative status, the sero-prevalence rate is 24.5%. Similarly, for those who had tested for HIV in last six months preceding the interviews, the sero-prevalence rate is 48.7%, while for those who did not test for HIV in the same period, the HIV sero-prevalence rate is 51.9% (see Tables C33).

High HIV sero-prevalence rates have also been observed amongst those who have strongly disagreed that several people are infected with HIV in the community (57.5%) and those who have accepted that several people are infected with HIV (54.5%), while those who have strongly agreed that several people are infected with HIV in the community have HIV sero-prevalence rate of (50.2%). Similarly, those who have known someone living with HIV

are more likely to be HIV positive status (53.5%), while those who don't know someone living with HIV are more likely to be HIV sero-negative status (100%; see Tables C35 and 36). The sero-prevalence of HIV amongst individuals keeping two sexual partners is 58.4%, while for those keeping more than two partners; the rate is 46.7% (see Tables C37). Furthermore, the sero-prevalence rate of HIV amongst those who have identified sharing of infected Syringes and Needles, as a sources of HIV infection is 57.5%, while the seroprevalence rate of HIV amongst those who have identified unprotected sex with infected person, as a source of HIV infection is 55.2% (see Tables C38). Whereas the sero-prevalence rate of HIV is 52.7% amongst those who are satisfied with their relationship, the seroprevalence rate of HIV is 62.9% amongst those who are highly satisfied with their sexual relationship (see Tables C39).

Table C33

HIV Status by Knowledge of Partner's HIV Status, and Tested for HIV in the Last Six Months

Knowledge of Partner's HIV Status						
	Yes	No	Total	%		
HIV status						
Positive	56.1%	32.5%	805	50.3		
Negative	43.9%	67.5	796	49.7		
Total	1207	394	1601			
%	100	100	100			
	Tested for HIV	in the Last Six Mo	onths			
Positive	48.7%	51.9%	805	50.3		
Negative	51.3%	48.1%	796	49.7		
Total	807	794	1601			
%	100	100	100			

	Partners' HIV Status				
	Positive	Negative	Don't know	Total	%
HIV status					
Positive	99.0%	23.5%	32.5%	805	50.3
Negative	1.0%	76.5%	67.5%	796	49.7
Total	521	686	394	1601	
%	100	100	100	100	

HIV Status by Partners' HIV Status

Note. The source of data is from field Survey, 2014

Table C35

HIV Status by Knowledge of Whether Several People are infected with HIV, and by will feel bad if infected with HIV

Knowledge of whether Several are infected with HIV						
	Strongly disagree	Disagree	Agree	Strongly disagree	Total	%
HIV Status						
Positive	57.5%	16.0%	54.3%	50.2%	805	50.3
Negative	42.3%	84.0%	45.7%	49.8%	796	49.7
Total	26	94	764	717	1601	
%	100	100	100	100	100	
		Will Feel Bac	l if Infected wi	th HIV		
Positive	0.0%	0.0%	0.0%	0.0%	805	50.3
Negative	100%	100%	100%	100%	796	49.7
Total	30	29	307	430	1601	
%	100	100	100	100	100	

	Knowledge of Someone with HIV				
	Yes	No	Total	%	
HIV status					
Positive	53.5%	0.0%	805	50.3	
Negative	46.5%	100%	796	49.7	
Total	1503	98	1601		
%	100	100	100		

HIV Status by Knowledge of Someone with HIV

Note. The source of data is from field Survey, 2014

Table C37

HIV Status by Number of Sexual Partners Kept by Respondents

Number of Sexual Partners Kept by Respondents					
	One	Two	More than 2	Total	%
HIV status					
Positive	30.1%	58.4%	6.7%	805	50.3
Negative	69.9%	41.6%	53.3%	796	49.7
Total	289	903	409	1601	
%	100	100	100	100	

Note. The source of data is from field Survey, 2014

Table C38

HIV Status by Knowledge of Sources of Spread of HIV

Knowledge of Source of Spread of HIV							
	Unprotected casual sex	Blood transfusion	Sharing Syringes or Needles	Others	Don't know	Total	%
HIV status							
Positive	55.2%	59.0%	57.5%	37.8%	9.3%	805	50.3
Negative	44.8%	41.0%	42.5%	62.2%	90.7%	796	49.7
Total	1173	139	80	37	172	1601	
%	100	100	100	100	100	100	

	Not satisfied	Somewhat satisfied	Satisfied	Highly satisfied	Total %
HIV status					
Positive	41.3%	30.9%	52.7%	62.9%	805 50.3
Negative	58.7%	69.1%	47.3%	37.1%	796 49.7
Total	92	272	935	302	1601
%	100	100	100	100	100

Satisfaction with Primary Relationship

HIV Status by Satisfaction with Primary Relationship

Note. The source of data is from field survey, 2014

C1.6 Summary

A brief examination of the distribution of HIV status of the individuals and the sexual capacity sexual motivation, sexual performance, HIV and sexual webs variables indicates that (1) the women have higher sero-prevalence rates of HIV than the men (2) the older age groups (55 years+) have higher HIV sero-prevalence rates than the younger age groups below 30 years(3) the rich also have very high HIV sero-prevalence rates (4) those from single family have very high HIV sero-prevalence rates (5) those with more than one sexual partner have high HIV sero-prevalence rates, and (6) those who have indulged drink alcohol have high HIV sero-prevalence rates.

APPENDIX D

Research Questionnaire

Questionnaire for Sexual Behaviours and HIV/AIDS Study amongst the Tiv People of North Central Nigeria

Instructions: Please, tick the option that is applicable and comment if required.

Section A: Socioeconomic and demographic variables

1. Residence: (a) Urban (b) Rural

1b. Location: (a) Urban-Ipusu (b) Urban-Ichongu (c) Rural-Ipusu (d) Rural-Ichongu

- 2. What is your Sex? (a) Male (b) Female
- 3. What was your age during the last birthday?

(a) 18-19yrs (b) 20-24yrs (c) 25-29yrs (d) 30-34yrs

- (e) 35-39yrs (f) 40-44yrs (g) 45-49yrs (h) 50-54yrs (i) 55-59yrs (j) 60+
- 4. What is your relationship status?

(a) Married (b) Single (c) Widowed (d) Divorced (e) Separated (f) cohabiting/living together

5. What is the level of your educational attainment?

(a) No formal schooling (b) Primary (c) Secondary (d) Tertiary

- 6. What is your main/primary occupation?
 - (a) Farming (b) Civil service (c) Business (d) Student (e) Unemployed

(f) Others.....

- 7. What is your monthly income?
 - (a) Less than N25, 000 (b) N25, 000-49000, (C) N50, 000-99000 (d) N100, 000 +
- 8. What is your religion?
 - (a) Christianity (b) Islam (c) Traditional religion (d) Others.....
- 9. What type of family (respondent parents) have you come from?

(a) Monogamous (b) Polygamous (c) Single parent (d) Others.....

- 10. Do you receive assistance of any form for your daily needs from any member of your family?
 - (a) Yes (b) No (if No, go to question 11)

10a, what is the type of support? (a) Money (b) Material (state).....

Section B: Reasons for engaging in sexual relationship

11. Are you currently in relationship that sometimes involves sex?

(a) Yes (b) No

12. Some people engage in relationship because of certain reason(s); which of the following statements apply to you?

12a. I'm in relationship because of love.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

12b. I'm in relationship because I need money for my daily needs.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

12c. I'm in relationship because I would like child/children.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

12d. I'm in relationship for pleasure.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

12e. I'm in relationship because I need a place to live.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

12f. I'm in relationship because I need a favour. State.....

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

Section C: Sexual behaviours

13. Which of the following applies to your current sexual relationship?

(a)Heterosexual (b) bisexual (c) lesbian (d) Homosexual

14. Have you ever heard of condoms?

. 10
o question 16)

14a. Have you ever used Condoms?

14b What type of condoms? (a) Male (b) Female

14c What is the brand of the condoms?

14e. Do you prefer a brand of condom to another? Give reason.....

14f. Have you ever experienced the following during sex?

- (i) Condom breakage (a) Yes (b) No
- (ii) Condom slips off (a) Yes (b) No

14g How often did you or your partner use condoms in the past six months?

(a) Did not use condoms (b) Used condoms sometimes (c) Always used condoms

15. What are the reasons for not using condoms? (a) Don't know where to get one (b) It is too expensive (c) It reduces sexual pleasure (d) It is generally scarce (e) I need child (f) Others..... 16. Do you drink alcohol? (a) Yes (b) No (if No, go to question 17) 16a. Have you ever engaged in penetrative sex while you had taken alcohol? (b) No (a) Yes 16b. What type of alcohol do you take? (a) Ogogoro (b) Burukutuu (c) Beer (d) Palm wine (e) Others..... 16c.How often do you drink in a week? (b) two times (c) Three times (d) More than three times (a) 1time 17. Do you take drugs such as solution, cannabis or any strong traditional mixtures? (a) Yes (b) No (if No, go to question 18) 17a.Which type of drug do you take? 17b. Have you ever taken drugs to enhance penetrative sexual performance? (a) Yes (b) No 18. Indicate whether you agree or disagree with the following statements 18a. Watching Nollywood films with pornographic scenes influences sexual behaviour in this community? (a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree 18. b Drinking joints in this community influence secret and transactional sex (a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree 18. c Hotels in this community influence secret and transactional sex (a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree Section D **Issues about HIVAIDS** 19. How long have you lived with your current partner? (a) Less than one year (b) Over one but less than 5 years (c) Over 5 years 20. Females only. How many wives or women do your partner has? (a) One (b) two (c) More than two 20a. Do you know whether he has a 'secret' lover apart from you or the other wives? (a) Yes (b) No 21. Men only. Do you know whether your partner or wives is /are having a secret lover?

(a) Yes (b) No

(a) Yes 22. Have you heard of HIV/AIDS? (b) No 22a Have you known someone who is living with HIV/AIDS? (a) Yes (b) No 22b. What is your relationship with the person? (a) Husband/wife (b) Brother (c) Sister (d) Friend (e) Parent(s) (f) Child/children (e) Others..... 23. How many people do you know are living with HIV/AIDS? (a) One (b) Two (c) More than two 23b. How many people do you know have died from HIV/AIDS? (a) One (b) Two (c) More than two 24. Have you ever been tested for HIV? (a) Yes (b) No (if No, go to question 25) 24a what is your status? (a) Positive (b) Negative 25. Do you know your partners HIV status? (a) Yes (b) No 25a what is your partner's HIV status? (a) Positive (b) Negative 26. Have you tested for HIV in last six months? 27. Sero-negative only. I will feel very bad if I'm infected with HIV/AIDS (a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree 28. Several people have been infected with HIV/AIDS in this community (a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree 29. What is the main source of spread of HIV/AIDS among adults in this community? (a) Unprotected casual sex (b) transfusion of infected blood (c) Sharing of syringes or needles (d) Don't know (e) Others..... 30. How many sexual partners have you kept in the past five years? (a) One (b) Two (c) More than two 31. (HIV positive only), for how long have you been collecting antiretroviral drugs? (a) Less than one year (b) one to less than 3 years (c) 3 to less than 5 years (d) 5 years and above 32 What is the level of your partner's educational attainment? (a) No formal schooling (b) Primary (c) Secondary (d) Tertiary 33. What is your partner's main/primary occupation? (a) Farming (b) Civil service (c) Business (d) Student (e) Unemployed (f) Others.....

34. Do you receive financial assistance for your daily needs from your partner?

(a) Yes (b) No

35. I'm one of the officials of my religious organization

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

36. The sexual relationship with my partner is guided by rules and regulations of my religious organisation.

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

37. I'm a regular attendant of the activities organized by my religious organization

(a) Strongly disagree (b) Disagree (c) Agree (d) Strongly agree

38. The relationship with my partner is guided by:

(a) Religious laws (b) Customary laws (c) Court laws (d)

Others.....

39. How many children do you have with your current partner?

(a) No child (b) One child (c) Two children (d) Three children (e) More than three children.

40. How many children do you have with your previous partner? (Only those with more than one sexual partner within the last 5 years)

(a) No child (b) One child (c) Two children (d) Three children (e) More than three children.

41. How satisfied are you in your current sexual relationship?

(a) Not satisfied (b) Somewhat satisfied (c) Satisfied (d) Highly satisfied.

42. What is your religious organization?

(a) Catholic (b) Protestant (c) Pentecostal (d) Islam (e) Traditional religion

43. Has your current partner ever stayed away without you for work or business more than the following periods?

(a) Less than three months (b) Three months or more but less than 6months (c) Six months or more but less than 9 months (d) Nine months or more but less than 1 year(e) One year or more

Section E: Qualitative data Collection Guide

1. How is the sexual behaviour of young people who are not yet married in this community?

2. How does being a woman affect decision making within sexual relationships in this community?

3. In your opinion, do people in this community like having more than one sexual partner?3a. How do you feel about it?

4. People don't want their sexual partners to have other secret lovers. In your opinion, what are the things they do to check each other?

5. How does poverty affect sexual behaviour in this community?

6. Do you think watching home video with pornographic scenes influences sexual behaviour here?

7. There are many drinking joints in this community where people drink and discuss issues about sex. In your opinion, how do these joints affect sexual behaviour?

8. There are also many hotels built by politicians in the nook and crannies of this community. In your opinion, how do these hotels influence secret and transactional sex?

9. How do people react to those living with HIV in this community? How does the reaction affect people living with HIV socially?

APPENDIX E

Summary of Focus and Limitations of Health Behaviour Models and Theories

Table E1a

Summary of Focus, and Limitations of Most Frequently Used Sexual Behaviour Models and

Theories

Model	Focus	Limitations
Social Cognitive Theory Bandura, 1986	Reciprocal determinism between individual's sexual behaviours and environment. Concepts used are behaviour capability, expectations, self-efficacy, observation learning, and reinforcement. It has been used in US (Diclement et la, 2008)	It cannot be used to explain broader cultural and contextual (poverty, power, and) gender on sexual behaviour.
Health Belief Model Becker and Maiman, 1975; Rosenstock, 1974	Individual beliefs and attitudes as proximal predictors of sexual behaviours. Concepts are perceived threat, perceived benefits, perceived barriers and cues to action. It has been used in Taiwan (Lin et al 2005)	The effects of power, gender, poverty and other structural factors on sexual behaviours cannot be examined the model
Theory of Reasoned/Planned Action Ajzen and Fishbein, 1980	Individual's belief, attitudes, intensions and behaviours as proximal predictors of sexual behaviours. Concepts are behavioural beliefs, normative beliefs, intentions and attitude. It has been used in Netherlands (Gebhardt et al 2005)	It cannot be used to examine the influence of peer groups, power and structural factors on sexual behaviours.

Note. Source is from Comparative Analysis of Health Behaviour Theories and Models

Table E1b

Summary of Focus, and Limitations of Most Frequently Used Sexual Behaviour Models and Theories

Mode	Focus	Limitations
Trans-theoretical Model	Individuals process of change in	It cannot be used to assess the
Prochaska et al, 1994	sexual behaviour through discrete	influence of factors such as
	and qualitatively distinct stages. The	poverty, gender, and other
	stages are pre-contemplation,	relational variables on sexual
	contemplation, preparation for action,	behaviours.
	action and maintenance of action. It	
	has been used in Rhode Island (Noar	
	et al, 2001).	
	<u> </u>	
Social Network Theory	The relationship between sexual	The theory cannot be used to
Morris, 1997	partners, and influence of immediate	explain sexual behaviour in dyad or
	network subculture on sexual	triad (monogamous, polygamous
	behaviours. Social relationship is	marriages) who are not in network.
	characterized by selective mixing and	It does not consider broader
	variations in partnership patterns.	structural factors such as poverty,
	Important to this theory are	gender roles, power etc. It is
	composition of social networks,	difficult to apply where there are
	attitude to safer sex, support for	no clear network structure and in
	change in sexual behaviour, and	comparative studies where
	whether particular individuals in the	communities may have different
	network are at risk and may endanger	network structures. The concepts of
	others. It has been used in US	nodes and actors are not suitable
	(Peterson, 2009).	for studies on sexual intimacy.

Note. Source is from Comparative Analysis of Health Behaviour Theories and Models

APPENDIX F

Schema for Quantitative Data Analysis

The following steps were taken to examine the relationship between the dependent and independent variables. Controls were applied to identify modifiers. Both fixed and interactive effect analysis were employed. The (10) levels of quantitative data analysis are shown below:

3.8.1 Level 1

After all the preliminaries of data entry and examination of frequency distributions were completed, step 1 will involve the examination of the following relationships:

(1) Levels of intimacy and individual variables (2) Levels of intimacy and family variables

(3) Levels of intimacy and community variables (4) Levels of intimacy and global variables

(5) Levels of intimacy and sexual motivation variables

(6) Levels of intimacy and sexual performance variables

(7) Levels of intimacy and sexual webs variables (8) levels of intimacy and condom use

(9) Levels of intimacy and unsafe sexual behaviour

3.8.2 Level 2

(10) Levels of intimacy and individual variables and family variables

(11) Levels of intimacy and individual variables and community variables

(12) Levels of intimacy and individual variables and global variables

(13) Levels of intimacy and individual variables and sexual motivation variables

(14) Levels of intimacy and individual variables and sexual performance variables

(15) Levels of intimacy and individual variables and sexual webs variables

(16) Levels of intimacy and individual variables and condom use

(17) Levels of intimacy and individual variables and unsafe sexual behaviour

3.8.3 Level 3

(18) Levels of intimacy and family variables and community variables

(19) Levels of intimacy and family variables and global variables

(20) Levels of intimacy and family variables and sexual motivation variables

(21) Levels of intimacy and family variables and sexual performance variables

(22) Levels of intimacy and family variables and sexual webs variables

(23) Levels of intimacy and family variables and condom use

(24) Levels of intimacy and family variables and unsafe sexual behaviour

(25) Levels of intimacy and family variables and the spread of HIV/AID and STIs 3.8.4 Level 4

- (26) Levels of intimacy and community variables and global variables
- (27) Levels of intimacy and community variables and sexual motivation variables
- (28) Levels of intimacy and community variables and sexual performance variables
- (29) Levels of intimacy and community variables and sexual webs variables
- (30) Levels of intimacy and community variables and condom use
- (31) Levels of intimacy and community variables and unsafe sexual behaviour
- (32) Levels of intimacy and community variables and the spread of HIV/AIDS and STIs

3.8.5 Level 5

- (33) Levels of intimacy and global variables and sexual motivation variables
- (34) Levels of intimacy and global variables and sexual performance variables
- (35) Levels of intimacy and global variables and sexual webs variables
- (36) Levels of intimacy and global variables and condom use
- (37) Levels of intimacy and global variables and unsafe sexual behaviour
- (38) Levels of intimacy and global variables and, the spread of HIV/AIDS and STIs

3.8.6 Level 6

- (39) Levels of intimacy and sexual motivation variables and sexual performance variables
- (40) Levels of intimacy and sexual motivation variables and sexual webs variables
- (41) Levels of intimacy and sexual motivation variables and condom use
- (42) Levels of intimacy and sexual motivation variables and unsafe sexual behaviour
- (43) Levels of intimacy and sexual motivation variables and the spread of HIV/AIDS and STIs

3.8.7 Level 7

- (44) Levels of intimacy and sexual performance variables and sexual webs variables
- (45) Levels of intimacy and sexual performance variables and condom use
- (46) Levels of intimacy and sexual performance variables and unsafe sexual behaviours

(47) Levels of intimacy and sexual performance variables and the spread of HIV/AIDS and STIs

3.8.8 Level 8

(48) Levels of intimacy and sexual webs variables and condom use

- (49) Levels of intimacy and sexual webs variables and unsafe sexual behaviour
- (50) Levels of intimacy and sexual webs variables and the spread of HIV/AIDS and STIs

3.8.9 Level 9

(51) Levels of intimacy and all significant predictors

3.8.10 Level 10

- (52) Levels of intimacy and condom use and unsafe sexual behaviour
- (53) Levels of intimacy and the spread of HIV/AIDS and STIs
- (54) Levels of intimacy and unsafe sexual behaviour and the spread of HIV/AIDS and STIs
- (55) Unsafe sexual behaviour and positive sexual webs
- (56) Positive webs and the spread of HIV/AID STIs
- (57) Nesting of some variable of interest

APPENDIX G

List of Publications in Relation to the Thesis

- Timiun, G.A. (2011). Sexual webs model for the explanation of unsafe sexual behaviours: knitting all the perspective of unsafe sexual behaviours. *International Journal of Humanities and Social Sciences 1(17): Special Issue 118-125*
- Timiun, G.A. (2012) sexual webs model for the examination of unsafe sexual behaviours and the spread of sexually transmitted diseases including HIV/AIDS. Asian Social Science, Vol. 8, No.7: doi:10.5539/ass.v8n7p119.

APPENDIX H

Ethics Approval Letter

2013 233V Ethics application approved!

Kylie Pashley [Kylie.Pashley@acu.edu.au] on behalf of Res Ethics [Res.Ethics@acu.edu.au]

Sent: Friday, March 07, 2014 2:15 AMTo: Tim Scrase [Tim.Scrase@acu.edu.au]; Godwin Aondohemba TimiunCc: Helen Stapleton [Helen.Stapleton@acu.edu.au]; Res Ethics [Res.Ethics@acu.edu.au]Attachments:

Dear Applicant,

Principal Investigator: Prof Timothy Scrase Student Researcher: Mr Godwin Timiun (HDR student) Ethics Register Number: 2013 233V Project Title: Contextual Factors Influencing Unsafe Sexual Behavior and the Spread of HIV/AIDS among the Tiv People of Central Nigeria. Risk Level: Low Risk 3 Date Approved: 07/03/2014 Ethics Clearance End Date: 31/12/2014

This email is to advise that your application has been reviewed by the Australian Catholic University's Human Research Ethics Committee and confirmed as meeting the requirements of the National Statement on Ethical Conduct in Human Research subject to the following conditions:

Permissions to be obtained from the traditional rulers and medical directors

This project has been awarded ethical clearance until 31/12/2014. In order to comply with the National Statement on Ethical Conduct in Human Research, progress reports are to be submitted on an annual basis. If an extension of time is required researchers must submit a progress report.

Whilst the data collection of your project has received ethical clearance, the decision and authority to commence may be dependent on factors beyond the remit of the ethics review process. The Chief Investigator is responsible for ensuring that appropriate permission letters are obtained, if relevant, and a copy forwarded to ACU HREC before any data collection can occur at the specified organisation. Failure to provide permission letters to ACU HREC before data collection commences is in breach of the National Statement on Ethical Conduct in Human Research and the Australian Code for the Responsible Conduct of Research.

If you require a formal approval certificate, please respond via reply email and one will be issued.

Decisions related to low risk ethical review are subject to ratification at the next available Committee meeting. You will only be contacted again in relation to this matter if the Committee raises any additional questions or concerns. Researchers who fail to submit an appropriate progress report may have their ethical clearance revoked and/or the ethical clearances of other projects suspended. When your project has been completed please complete and submit a progress/final report form and advise us by email at your earliest convenience. The information researchers provide on the security of records, compliance with approval consent procedures and documentation and responses to special conditions is reported to the NHMRC on an annual basis. In accordance with NHMRC the ACU HREC may undertake annual audits of any projects considered to be of more than low risk.

It is the Principal Investigators / Supervisors responsibility to ensure that:

- 1. All serious and unexpected adverse events should be reported to the HREC with 72 hours.
- 2. Any changes to the protocol must be approved by the HREC by submitting a
- Modification Form prior to the research commencing or continuing.

3. All research participants are to be provided with a Participant Information Letter and consent form, unless otherwise agreed by the Committee.

For progress and/or final reports, please complete and submit a Progress / Final Report form:

http://www.acu.edu.au/research/support_for_researchers/human_ethics/forms

For modifications to your project, please complete and submit a Modification form: http://www.acu.edu.au/research/support_for_researchers/human_ethics/forms

Researchers must immediately report to HREC any matter that might affect the ethical acceptability of the protocol eg: changes to protocols or unforeseen circumstances or adverse effects on participants.

Please do not hesitate to contact the office if you have any queries.

Kind regards, Kylie Pashley on behalf of ACU HREC Chair, Dr Nadia Crittenden

Ethics Officer | Research Services Office of the Deputy Vice Chancellor (Research) Australian Catholic University

APPENDIX I

Information Letter to Participants

Professor Tim Scrase

Associate Dean (Research) Faculty of Arts & Sciences

> Australian Catholic University 250 Victoria Parade East Melbourne VIC 3065 Locked Bag 4115 Fitzroy MDC VIC 3065 Telephone 613 9953 3842 Facsimile 613 9419 8188 Email Tim.Scrase@acu.edu.au www.acu.edu.au

Information Letter to Participants

TITLE OF PROJECT:

Sexual Behavior and HIV/AIDS Study in Nigeria PRINCIPAL INVESTIGATOR: Professor Timothy Scrase STUDENT RESEARCHER: Godwin Aondohemba Timiun Doctor of Philosophy (Social Science Research)

Dear participant,

I am Godwin Aondohemba Timiun from the Faculty of Arts and Sciences, Australian Catholic University, Melbourne; I am conducting this research for my PhD program and would like to invite you to participate in the study of sexual behavior and HIV/AIDS in Tivland.

There is the need for more research in the area of sexual behavior and HIV/AIDS given the continuous increase in new cases of HIV/AIDS infection through penetrative sex in Tivland. The research will be conducted through inviting you to participate in face to face interview using questionnaire with less fifty short questions. You may also be invited to participate in another interview on a different agreed upon time and place. The data from the questionnaires and interviews will be aggregated and analyzed using statistical or scientific techniques. There is the risk of discomfort associated with this study but it will dissipate after a few minutes as you may become aware that, the questions are about issues of sexual behavior and

HIV/AIDS that have preoccupied public discourse in Tivland since the beginning of HIV/AIDS epidemic.

You are to provide answers to the questions in the questionnaire based on your experience. The total demand on your time will not be more than one hour.

The study may be of benefit to you and the community because the findings will be made available for service providers to use in improving on existing program interventions to reduce the spread of HIV/AIDS or formulate new ones to reduce the spread of HIV/AIDS in Tivland. You will be given a piece of cake, soft drink and \$2 as subsidy for your transport fare.

Participation in this study is voluntarily. You can withdraw from the study at any stage without giving a reason. The information you have given to the student researcher before withdrawer will be destroyed and not used for the final report.

You will not be referred to by your name or described in ways that your identity can be inferred in the reports or publications. Your details will not be disclosed to any other person. All research data and findings will be kept in a locked filing cabinet in the Australian catholic University premises in Melbourne and will be destroyed after five years.

Ay complaint or concern you make about the research or student researcher and his field assistants will be treated in confidence and fully investigated. You will also be informed of the outcome of the complaint. In the event that you have any complaint or concern about the way you were treated in the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethic Committee at:

Chair, HREC

C/- Research Services

Australian Catholic University, Melbourne Campus

Locked Bag 4115, Fitzroy VIC 3065

Tel: 99533158; Fax: 99533315

This study has been approved by the Human Research Ethic Committee at Australian Catholic University. Participation in the research means you have given your voluntary consent to participate in the study. Any question regarding this research can be directed to:

Godwin Timiun

Phone: 0481535112; 07060980043; Or

Prof. Tim Scrase
Phone: 0459802689 Faculty of Arts and Sciences Australian Catholic University, St Patrick's Campus 115 Victoria Parade, Fitzroy 3065. If you agree to participate in this project, you should sign both copies of Consent Form, retain one copy for your records and return the other copy to the Student Researcher. Professor Timothy Scrase Godwin Aondohemba Timiun

.....

.....

Research Project Supervisor

Student Researcher

APPENDIX J

Consent Form

Professor Tim Scrase

Associate Dean (Research) Faculty of Arts & Sciences

> Australian Catholic University 250 Victoria Parade East Melbourne VIC 3065 Locked Bag 4115 Fitzroy MDC VIC 3065 Telephone 613 9953 3842 Facsimile 613 9419 8188 Email Tim.Scrase@acu.edu.au www.acu.edu.au

CONSENT FORM Copy for Researcher / Copy for Participant to Keep

TITLE OF PROJECT: Sexual Behavior and HIV/AIDS Study in Nigeria PRINCIPAL INVESTIGATOR: Professor Timothy Scrase STUDENT RESEARCHER: Godwin Aondohemba Timiun

I (the participant) have read (or, where appropriate, have had read to me) and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree to participate in this research project and am aware that interviews will be audio taped. I am also aware of the length of time that my commitment will take. I realize that I can withdraw my consent at any time without adverse consequences. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

(Please tick)

SIGNATUR OF STUDENT RESEARCHERDATE:.....

APPENDIX K

Consent to Conduct Research

