

**PERCEPTION OF INTIMATE PARTNER VIOLENCE AND RISK OF  
HIV INFECTION AMONG WOMEN IN SOUTH WEST**

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# CERTIFICATION

This is to certify that **OLWOOKERE MICHAEL**, of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic **“PERCEPTION OF INTIMATE PARTNER VIOLENCE AND RISK OF HIV INFECTION AMONG WOMEN IN SOUTH WEST”** in partial fulfillment of the award of Bachelor of Science (B.Sc.) in Demography and Social Statistics under my supervision.



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## **DEDICATION**

The project is dedicated to my father in heaven, God Almighty, the author and finisher of our faith who by his grace foreknew, predestined and made this work a success and for seeing me through my academic years. And to my parents, Mr. and Mrs. Olowookere for their love, care and support throughout the program.

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## ABSTRACT

Gender based violence induces power imbalances where, most often, men are the perpetrators and women the victims. Intimate partner violence is a form of gender based violence that is caused by intimate partners. Intimate partner violence occurs between two people in an intimate relationship. Violence is rampant even among Couples may be dating, cohabiting or married and violence can occur in or outside of the home. Youth and young adults in Nigeria are particularly vulnerable to HIV, with young women at higher risk than young men. The main aim of this research is to investigate the influence of intimate partner violence on the risk of HIV infections among women in Nigeria. Secondary data was used from National HIV & AIDS and Reproductive health survey (NARHS plus II, 2012), also, primary data in the form of in-depth interview was done to complement the secondary data. For the in-depth interview, 7 women were interviewed for the in-depth interview. 31,235 individuals were successfully interviewed, a total of 24,152 of the respondents were successfully tested for HIV. For the univariate analysis, frequency distribution and percentages of the variables was gotten. For the Bivariate analysis, chi-square was used to check for the relationship between variables and for the Multivariate analysis, binary logistic regression was used because the dependent variable is dichotomous (HIV status: positive or negative). From the univariate analysis, 7% of respondents experienced intimate partner violence, 83% of respondents did not experienced partner violence, while 10% of respondents don't know if they experienced partner violence. Furthermore, 4% of respondents had HIV, while 96% of respondents were diagnosed negative. The bivariate analysis revealed there is a significant relationship between those respondents who are currently married and HIV Status with  $\chi^2 = 12.7457$ ,  $P = 0.005$ , while there is a significant relationship between those respondents who refuse sex with their husband and HIV Status with  $\chi^2 = 9.50005$ ,  $P = 0.005$ . The multivariate analysis revealed that there is a significant relationship between those respondents who are ever married and HIV status with OR=1.04, 0.3981-0.8420(95% Conf.Interval). Also, there is a significant relationship between age of respondents and HIV status with  $p = 0.000$ , 2.4275-4.5566 (95% Conf.Interval). Also, there is a significant relationship between those respondents who refuse to have sex with their husband and HIV status with OR=2.17, 1.2890-1.9612 (95% Conf.Interval). There is a significant relationship between those respondents who do not experience partner violence and HIV status with OR=1.20, 2.5079-3.9204 (95% Conf.Interval), and also, there is a significant relationship between those respondents who do not know they experience partner violence and HIV status with OR=1.38, 1.8495-3.8239 (95% Conf.Interval). furthermore, there is a significant relationship between those respondents who had their first sex at age 15- 24 and HIV status with OR=3.32, 1.9715-3.1599 (95% Conf.Interval), there is a significant relationship between those respondents who had their first sex at age 25- 34 and HIV status with OR=2.46, 1.3697-4.4354 (95% Conf.Interval). Other indices are not significant. The study concludes that marital status, occupation, religion, age, age at first sex, refuses sex with him and other form of violence are good indicators of HIV infection. Efforts should be geared towards mitigating violence against women especially violence among intimate partners which is rearing its head in this 21<sup>st</sup> century.

## CHAPTER ONE

### 1.1 BACKGROUND TO THE STUDY

In 1993, the United Nations General Assembly defined violence against women as “any act of gender based violence that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women” (United Nations, 1993). The principal characteristic of gender-based violence is that it occurs against women, precisely because of their gender. Gender based violence induces power imbalances where, most often, men are the perpetrators and women the victims. Intimate partner violence is a form of gender based violence that is caused by intimate partners. There are different types of intimate partner violence which are physical, sexual and psychological. Intimate partner violence occurs between two people in an intimate relationship. Couples may be dating, cohabiting or married and violence can occur in or outside of the home.

W H O defined intimate partner violence (IPV) against women as “the range of sexually, psychologically and physically coercive acts used against adult and adolescence women by current or formal male intimate partner”. Intimate partner violence is an important global health issue. The 2010 Global Burden of Disease Study ranks IPV as 5th in years of life lost as a result of disability for women. IPV may take various forms, including physical, sexual and psychological. Globally, it is estimated that one in four women experiences violence from an intimate partner in her lifetime, making IPV the commonest form of violence against women. Although both men and women experience IPV, women experience significantly higher rates than men, and suffer more injury or death as a result. While some of the biological explanations of the association between IPV and HIV are speculative, several empirical studies have demonstrated strong plausibility for this relationship. For example, victims of IPV may suffer negative health impact, ranging from fatal health outcomes, such as suicide, homicide, maternal

mortality and AIDS-related mortality, to non-fatal health outcomes, such as injury, substance abuse, chronic pain and mental disorders. The reproductive health of victims can be affected, with compelling research evidence for an association between IPV and unsafe sexual practices, unintended pregnancy and unsafe abortion. (Marshall et.al., 2014).

Although most African people have heard of HIV and AIDS, there is still widespread misunderstanding about how HIV is spread, the consequences of infection, and how to protect against infection. Research and statistics has proven over time that women have the highest rate of the human immunodeficiency virus (HIV) (NACA, 2015). The most vulnerable groups are poorly educated women, those from rural backgrounds, and women who are economically dependent on men. Lower levels of education, taboos associated with the discussion of sexuality and sexual health, the submissive role of women in a relationship, and male control of decision-making regarding sexual relations might explain why African women are less knowledgeable about HIV/AIDS than men. Although most African men and women are aware of the protective benefits of condoms, negative attitudes towards the acceptability and safety of condom use are widespread. More sexual health campaigns tailored to women, especially those with low education levels and those from rural areas are needed to reduce the spread of HIV in Africa. In Nigeria, the HIV prevalence rate among adults' ages 15–49 as at 2012 was 3.1 percent. Nigeria has the second-largest number of people living with HIV. The HIV epidemic in Nigeria is complex and varies widely by region. Youth and young adults in Nigeria are particularly vulnerable to HIV, with young women at higher risk than young men. There are so many risk factors lead to HIV which violence is counted as one of them.

## **1.2 STATEMENT OF THE PROBLEM**

Globally, an estimated 35.3 million [32 200 000 - 38 800 000] people across all ages are living with human immunodeficiency virus (HIV), of which 70% reside in sub-Saharan Africa (SSA)

only (UNAIDS, 2013). Likewise, despite the fact that 12.7% of the world population resides in the SSA (PRB, 2014), 9 out of every 10 HIV infected pregnant women and children (less than 15 years) are in the African sub-region (WHO, 2011; UNICEF, 2015). The PRB (2014) estimates put Nigeria as the most populous African country, occupying about 19.3% of the total SSA population. This indicates that nearly one out of every four sub-Sahara Africans is a Nigerian. Women in relationships with violence have four times the risk for contracting STIs including HIV, than women in relationships without violence. Of all people living with HIV globally, 9% of them live in Nigeria. Although HIV prevalence among adults is remarkably small (3.2%) compared to other sub-Saharan African countries such as South Africa (19.1%) and Zambia (12.5%), the size of Nigeria's population means that there were 3.2 million people living with HIV in 2013. Approximately 210,000 people died from AIDS-related illnesses in Nigeria in 2013, which is 14% of the global total (UNAIDS, 2013; UNICEF, 2015; PRB, 2014). In 2009, according to the Nigerian National Agency for the Control of AIDS (NACA), about 1.72 million women and girls were living with HIV and AIDS with the highest prevalence rate of 5.6% among women in the age group 25-29. In 2012, there were 110,000 new HIV infections among women aged 15-49 years in Nigeria, ranking the country second (next only to South Africa) among countries with the highest burden of new HIV infections among women. Nigeria is one of 22 countries that account for 90% of pregnant women living with HIV (NACA 2012).

Violence against women and girls is a worldwide problem that crosses cultures, religions, and regions. It is not only a gross human rights violation; it is a public health epidemic and a major hindrance to global development efforts to reduce poverty. Violence or fear of violence has been implicated as a barrier to women seeking HIV testing. In sub-Saharan Africa, young women aged 15-24 are as much as eight times more likely than men to be HIV positive. The

first global report on Violence against women released by the World Health Organization<sup>10</sup> in June 2013 presents some alarming statistics: Overall, It is estimated that 35 per cent of women worldwide have experienced either physical and/or sexual intimate partner violence or sexual violence by a non-partner at some point in their lives. However, some national studies show that up to 70 per cent of women have experienced physical and/or sexual violence from an intimate partner in their lifetime (UN women, 2016; UNESCO 2013).

This study wishes to examine the link in Nigeria setting by using the NARHS (National HIV/AIDS and Reproductive Health Survey) data and supported by in-depth interview among women. This study will also provide more information by reviewing existing works or studies on HIV infection and Intimate partner violence among women done by other researchers for other countries and also for Nigeria. To enlighten people more on the forms, impact and consequences of violence and to know if it can also lead to HIV. This is a very important reproductive and public health issue.

### **1.3 RESEARCH QUESTIONS**

The research is meant to answer the following questions:

1. What is the prevalence of intimate partner violence in Nigeria?
2. What is the influence of socio-demographic, socio-economic and socio-cultural factors on the risk of contracting HIV for women?
3. What is the influence of intimate partner violence on women's risk of contracting HIV?

### **1.4 RESEARCH OBJECTIVE**

The main objective is to investigate the influence of intimate partner violence on the risk of HIV infections among women in Nigeria.

## **SPECIFIC OBJECTIVES**

1. To investigate the prevalence of intimate partner violence in Nigeria.
2. To examine the socio-demographic characteristics of women that makes them vulnerable to violence.
3. To examine the influence of intimate partner violence on the risk of contracting HIV.

## **1.5 JUSTIFICATION FOR THE STUDY**

In Nigeria, the first case of AIDS was officially reported in 1986 and the spread of the HIV has since been growing exponentially. With national prevalence of 3.4 (NACA, 2014), recent report shows that about 3.1 million people are living with HIV in the country (UNAIDS, 2013). Followed by India, Nigeria is therefore ranked the second highly HIV burdened country after South Africa in the world. The effects of intimate partner violence can be devastating and long lasting. They pose danger to a woman's reproductive health and can scar a survivor psychologically, cognitively and interpersonally. A woman who experiences domestic violence and lives in an abusive relationship with her partner may be forced to become pregnant or have an abortion against her will, or her partner may knowingly expose her to a sexually transmitted infection. The costs can include unwanted pregnancies, sexually transmitted infections (STI), physical injury and trauma (WHO, 2011; UNAIDS, 2013).

Good health is a basic human weal and is a basic objective of social and economic development. According to ICPD 1994 Reproductive health includes all matters relating to the wellbeing of the reproductive system and its function and processes. This study focuses on the perception of intimate partner violence and risk of HIV infection among antenatal clients which is seen as a very important reproductive health problem. Reproductive health is a basic human right and when tampered with hinders man from achieving his right. This problem affects the

development of a country. ICPD had a program of action which says that every sex act should be free of coercion and infection and every delivery and child birth should be healthy. This study wishes to address this problem and try to find solution to this problem. International organizations, governments, policy makers, academia, and programs such as NACA (National Agency for the control of Aids), NARHS (National HIV and AIDS and Reproductive Health), NDHS (Nigeria demographic and health surveys), NASCP ((National AIDS and STIs control program) etc. will benefit from this research.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 THE NATURE AND FORMS OF INTIMATE PARTNER VIOLENCE

According to WHO "intimate partner violence" describes physical violence, sexual violence, stalking and psychological aggression (including coercive acts) by a current or former intimate partner. An intimate partner is a person with whom one has a close personal relationship that can be characterized by Emotional connectedness, Regular contact, Ongoing physical contact and sexual behavior, Identity as a couple and Familiarity and knowledge about each other's lives. The relationship must not involve all of these dimensions.

Examples of intimate partners include current or former spouses, boyfriends or girlfriends, dating partners, or sexual partners. IPV can occur between heterosexual or homosexual couples; victims can be male or female and does not require sexual intimacy. There are four main types of IPV.

1. Physical violence is the conscious use of physical force with the possibility of causing death, disability, injury or harm. Physical violence includes coercing people to commit things like scratching, pushing, throwing, grabbing, biting, choking, aggressive hair pulling, slapping, punching, hitting, etc and use of strength against another person. Though not limited to the above acts.
2. Sexual violence: Sexual violence refers to sexual activity when consent is not obtained or not given freely. Women are more susceptible to violence, although it could happen to the opposite sex. The person responsible for the violence is typically male and usually someone known to the victim. The person can be, but is not limited to, a friend, coworker, neighbor, or family member



3. Stalking is a pattern of repeated, unwanted, attention and contact that causes fear or concern for one's own safety or the safety of someone else (e.g., family member or friend). Some examples include repeated, unwanted phone calls, emails, or texts; leaving cards, letters, flowers, or other items when the victim does not want them; watching or following from a distance; spying; approaching or showing up in places when the victim does not want to see them; sneaking into the victim's home or car; damaging the victim's personal property; harming or threatening the victim's pet; and making threats to physically harm the victim.
4. Psychological Aggression is the use of verbal and non-verbal communication with the intent to harm another person mentally or emotionally, and/or to exert control over another person. Psychological aggression can include expressive aggression (e.g., name-calling, humiliating); coercive control (e.g., limiting access to transportation, money, friends, and family; excessive monitoring of whereabouts); threats of physical or sexual violence; control of reproductive or sexual health (e.g., refusal to use birth control; coerced pregnancy termination); exploitation of victim's vulnerability (e.g., immigration status, disability); exploitation of perpetrator's vulnerability; and presenting false information to the victim with the intent of making them doubt their own memory or perception (e.g., mind games). (US department of health and human services, 2016).

Violence against women is increasingly recognized as a health issue in nearly every country in the world, and attention is turning to the measurement of its health consequences for women and their families (Ellsberg et al., 2008). In a study on the prevalence of IPV among currently married or cohabiting women in 10 developing countries shows that there is wide variation across countries in the prevalence of physical or sexual violence experienced by women and

perpetrated by their current husband/partner. The highest reported rates of physical violence were in Bangladesh (71%), Bolivia (52%) and Zambia 45%. Lowest reported rates were in Haiti (12%) and Dominican Republic 15%. Highest rate of sexual violence was reported in Bangladesh 26%, Kenya 15% and Bolivia (14%), whereas the lowest on sexual violence were reported in Moldova 3%, Dominican Republic 5% and Zambia 6%. The limitations of the study were found that guideline of WHO was used which recommends just asking one person in the household about violence and only ever married women age 10-49 were eligible for the women interview (Michelle, Kishor & Ansara, 2008).

According to Ursula lau fact sheet on Intimate Partner violence says often the physical violence enacted is accompanied by emotional attacks and threatening and controlling behaviors. Although intimate partner violence may be carried out by women, and individuals in a same-sex relationship, women are more likely to report being victimized in relationships by their male partners. Research undertaken by the Medical Research Council in south Africa revealed that one in four women in the general South African population has experienced physical violence at some point in her life.

## **2.2 RISK FACTORS OF VIOLENCE**

According to WHO, some risk factors of violence are consistently identified across studies from many different countries (rural and urban settings) The study proposes that violence is a result of factors operating at four levels which are the individual, relationship, community and societal.

### **Individual factors**

Some of the most consistent factors associated with a man's increased likelihood of committing violence against his partner(s) are: young age(demographic), low level of education(socio-economic), witnessing or experiencing violence as a child, harmful use of alcohol and drugs,

personality disorders, acceptance of violence (e.g. feeling it is acceptable for a man to beat his partner) and Past history of abusing partners.

Factors consistently associated with a woman's increased likelihood of experiencing violence by her partner(s) across different settings include: low level of education (socio-economic), exposure to violence between parents, sexual abuse during childhood, acceptance of violence and Exposure to other forms of prior abuse.

### **Relationship factors**

Factors associated with the risk of both victimizations of women and perpetration by men include: conflict or dissatisfaction in the relationship, male dominance in the family (social), economic stress, man having multiple partners (behavioral), disparity in educational attainment, i.e. where a woman has a higher level of education than her male partner(social)

### **Community and societal factors**

factors that have been found across studies includes; gender-inequitable social norms (especially those that link notions of manhood to dominance and aggression), poverty(social), low social and economic status of women, weak legal sanctions against IPV within marriage, lack of women's civil rights, including restrictive or inequitable divorce and marriage laws, weak community sanctions against IPV, broad social acceptance of violence as a way to resolve conflict and Armed conflict and high levels of general violence in society.

Examples of norms and beliefs that support violence against women includes when a man has a right to assert power over a woman and is considered socially superior, when a man has a right to physically discipline a woman for 'incorrect' behavior, Physical violence is an acceptable way to resolve conflict in a relationship, Sexual intercourse is a man's right in marriage, woman should tolerate violence in order to keep her family together, Sexual activity

(including rape) is a marker of masculinity and places where girls are responsible for controlling a man's sexual urges.

IPV may lead to a host of negative sexual and reproductive health consequences for women, including unintended and unwanted pregnancy, abortion and unsafe abortion, sexually transmitted infections including HIV, pregnancy complications, pelvic inflammatory disease, urinary tract infections and sexual dysfunction. IPV can have a direct effect on women's sexual and reproductive health, such as sexually transmitted infections through forced sexual intercourse within marriage, or through indirect pathways, for example, by making it difficult for women to negotiate contraceptive or condom use with their partner (WHO; Pan American Health organization, 2012). According to facts and figures: ending violence against women says Women who have been physically or sexually abused by their partners are 1.5 times more likely to acquire HIV, as compared to women who have not experienced partner violence. It is estimated that 35 per cent of women worldwide have experienced either physical and/or sexual intimate partner violence or sexual violence by a non-partner at some point in their lives. However, some national studies show that up to 70 per cent of women have experienced physical and/or sexual violence from an intimate partner in their lifetime (UN 2016).

### **2.3 THE NATURE AND FORMS OF HIV**

The acquired immunodeficiency syndrome (AIDS) is the late stage of an infection that is caused by the human immunodeficiency virus (HIV). HIV is a retrovirus that attacks and destroys certain white blood cells. The targeted destruction weakens the body's immune system and makes the infected person susceptible to infections and diseases that ordinarily would not be life threatening. AIDS is considered a blood borne, sexually transmitted disease because HIV is spread through contact with blood, semen, or vaginal fluids from an infected person. HIV belongs to a group of viruses known as retroviruses.

In a research by Burgoyne and Drummond (2008) on knowledge of HIV and AIDS in women in sub-Saharan Africa says that most African people have heard of HIV and AIDS, there is still widespread misunderstanding about how HIV is spread, the consequences of infection, and how to protect against infection. The most vulnerable groups are poorly educated women, those from rural backgrounds, and women who are economically dependent on men. Lower levels of education, taboos associated with the discussion of sexuality and sexual health, the submissive role of women in a relationship, and male control of decision-making regarding sexual relations might explain why African women are less knowledgeable about HIV/AIDS than men. Although most African men and women are aware of the protective benefits of condoms, negative attitudes towards the acceptability and safety of condom use are widespread (Burgoyne and Drummond, 2008).

#### **2.4 VIOLENCE AND RISK OF HIV AMONG WOMEN**

The global HIV epidemic is rapidly “feminizing”. Increasing numbers of women are HIV infected worldwide, and within the Indian context women account for an estimated 40% of cases among 2.5 million people living with HIV/AIDS. Limited pre-marital and extra-marital sexual behavior among Indian women renders heterosexual transmission from husbands the dominant infection pathway for wives. High levels of intimate partner violence (IPV) victimization are consistently documented in South Asia, with an estimated 1 in 3 women victimized across their lifetime. Such victimization is increasingly considered relevant to women’s STI/HIV risk in this region and elsewhere. A growing body of evidence demonstrates elevated STI/HIV prevalence among abused women, including recent findings from a national sample of Indian women illustrating greater HIV infection prevalence based on exposure to abuse from husbands. Thus, abused women’s increased STI/HIV prevalence may reflect greater likelihood of STI/HIV exposure, rendering IPV a risk marker for their male partners’

STI/HIV infection. IPV may also increase women's STI/HIV risk more directly by providing enhanced opportunity for STI/HIV transmission. Potential mechanisms by which abuse may facilitate STI/HIV transmission include women's limited negotiation capacity to refuse sex or use condoms, and the potential for physical trauma (i.e., tearing or lacerations) in situations of forced sex. While IPV cannot lead to STI/HIV in the absence of pathogen exposure, abuse may serve to enhance transmission in the presence of male partner STI/HIV, rendering IPV a direct transmission risk factor. IPV may be considered to pose "double jeopardy" to women, i.e., limited control over sexual relationships with male partners more likely to be HIV-infected (Michelle et.al, 2012).

A study on Sexual Violence and HIV Risk Behaviors among a Nationally Representative Sample of Heterosexual American Women shows that HIV infection remains a significant public health problem in the lives of women in the United States. In 2006, women accounted for 27% of new HIV diagnoses, and high-risk heterosexual contact was the source for 80% of these infections. Minority women are disproportionately affected by HIV infection. In 2006, the HIV diagnosis rate for African American women (56.2 per 100,000) and Hispanic women (15.1 per 100,000) far exceeded that for white women (2.9 per 100,000). Within the past decade, sexual violence has been implicated as an important risk factor for HIV infection in women. Understanding how the dynamics of sexual violence affects HIV risk is imperative to develop comprehensive intervention and prevention efforts to combat the epidemic. Sexual violence, including a forced first sexual intercourse, has been consistently shown to be associated with a number of HIV risk behaviors, including sex with multiple partners, inconsistent condom use, higher rates of sexually transmitted diseases (STDs), unprotected anal sex, and substance abuse according to (Stockman et al, 2010)

A study on the Intimate partner violence and the correlation between pregnant HIV positive Nigerians shows that IPV is an important problem because it is global, the most

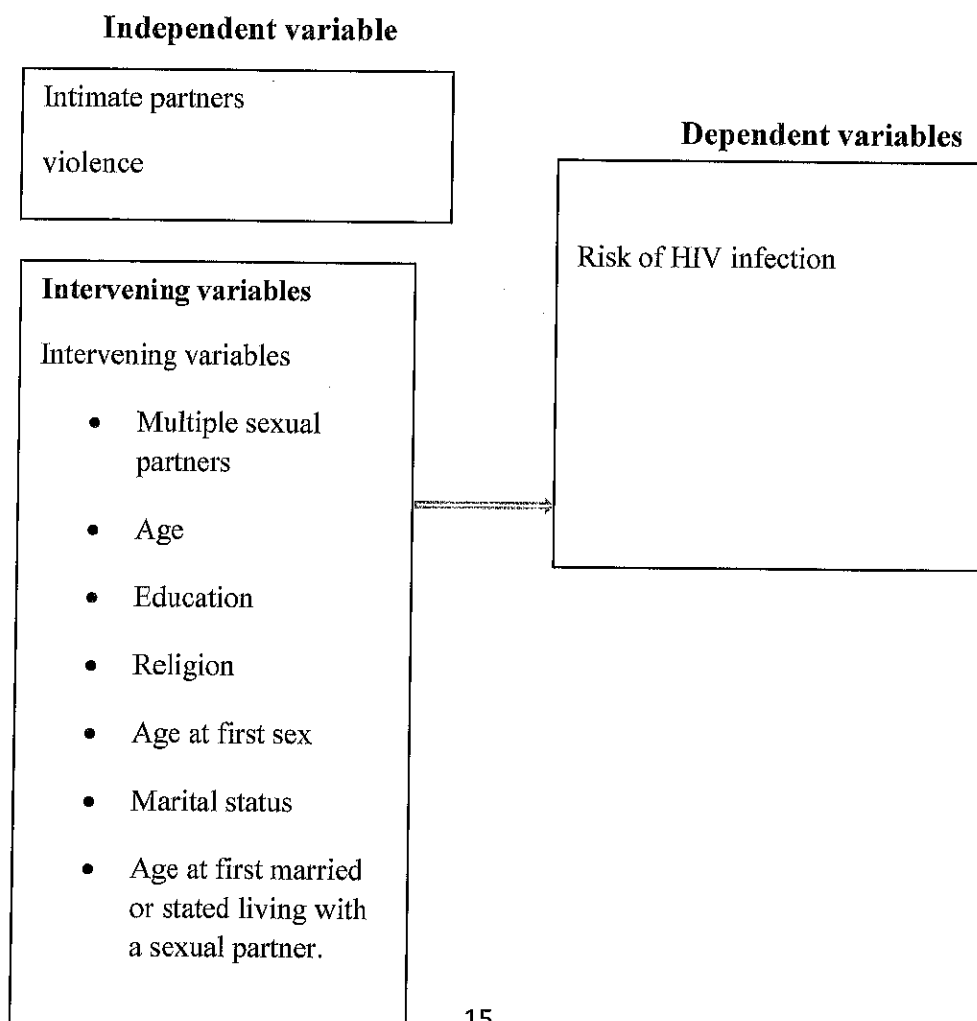
common form of violence against women and is a major public health problem abused individuals may also suffer from a sense of helplessness and fatalism that further undermines one's interest and ability to maintain health and adopt disease coping mechanisms. The study focused on the prevalence, types and correlates of Intimate Partner Violence (IPV) in pregnant women living with HIV. Between 20 and 50% of women reported experiencing violence by an intimate male partner. In sub-Saharan Africa, the reported prevalence of IPV ranges from 20 to 71%. However, the prevalence of IPV is believed to be under estimated because of under reporting and lack of standardized methods for the estimation of IPV. IPV is associated with high levels of negative, physical and mental health outcomes and associated with socio-demographic, cultural, lifestyle factors and HIV status. The links between HIV/AIDS and GBV are becoming increasingly apparent.

Violence makes woman vulnerable to HIV through three mechanisms. First and most obvious, there is the possibility of direct transmission through forced or coerced sexual acts. Second, the trauma associated with violent experiences can impact later sexual behavior. Third, violence or the threat of violence may limit women's ability to adopt safer sex practices within ongoing relationships. Also of significant importance is the emerging evidence that being HIV positive is a risk factor of violence against women. Several studies undertaken in the US and South Africa indicate a positive relationship between HIV/AIDS and domestic violence. Also the notification of a positive HIV test result can profoundly affect a woman's psychological and physical wellbeing (Ezechi, Okafor & Onwujekwe, 2009).

A Regional Workshop - 15th-16th July 2013 Dar-es-Salaam, Tanzania on the links between GBV and HIV in great lakes region were of the opinion that forced sex may directly lead to HIV transmission, and women and girls may be unable to negotiate safer sex because of gender power inequalities. In addition, women living with HIV may also face increased

levels of violence, due to stigma and discrimination. Both GBV and the HIV pandemic are health-related but also deeply socially constructed. Neither is solely biological; both are informed by social attitudes about gender and roles of men and women in societies. Both are about unequal gender power relations, political will, governmental accountability, and resource allocation (UNESCO 2013). Sexuality and sexual behavior are traditionally based on men's desires and performance, and men typically are assumed to be more knowledgeable about these issues than women. Thus, when women want to inform their male partners about the risk of HIV or to assert that they want to use condoms (which are often thought to interfere with men's performance and enjoyment), men may feel that norms are being broken and that their female partners are threatening their masculinity (Rosenthal\_levy 2010 ).

## 2.5 CONCEPTUAL FRAME WORK





## **HYPOTHESIS**

1. H0: Socio-demographic behavioral characteristics of women do not influence HIV infection  
H1: Socio-demographic behavioral characteristics of women may influence HIV infection
2. H0: Intimate partner violence does not influence women's HIV infection  
H1: Intimate partner violence may influence women's HIV infection.

## CHAPTER THREE

### RESEARCH METHODOLOGY

3.0 This chapter explains the methodology of the study by describing the study area, study population, study size, method of analysis etc. it also shows or explains the variables used i.e. showing the dependent, independent and intervening variable.

#### **3.1 Background of the study area**

Nigeria, one-third larger than Texas and the most populous country in Africa, is situated on the Gulf of Guinea in West Africa. Its neighbors are Benin, Niger, Cameroon, and Chad. Nigeria has the total land area of 923,768 square kilometers. Demographically according to 2014 population estimate, Nigeria has a total population of 177,155,754 with the growth rate of 2.47% and life expectancy of 52.62. the largest cities in Nigeria (2011 estimate) are Lagos, Kano, Ibadan, Port Harcourt and Kaduna. Nigeria is made up of approximately 400 ethnic groups and 450 languages. There are six geopolitical zones of Nigeria, the six geopolitical zones of Nigeria is a major division in Mordern Nigeria, created during the regime of President Ibrahim Badamosis Babangida. Nigerian economic, political and educational resources are often shared across the zones. The six zones have not been entirely carved out based on geopolitical location, but rather states with similar cultures, ethnic groups and common history were classified in the same zone. The zones are; North-Central, North-East, North-West, South-East, South-South and South-West. The basic unit of money in Nigeria is NAIRA (100 kobo equal 1 naira in Nigeria). (Wikipedia & discover Nigeria 2016).

## **Ethnicity**

Nigeria has a rich and diverse cultural history that extends back to at least 500BC, when the Nok people first inhabited the area. The ethnicity of Nigeria is so varied that there is no definition of a Nigerian beyond that of someone who lives within the borders of the country. The ethnic variety is both dazzling and confusing, and there are more than 250 ethnic groups with their own language and distinct cultural heritage, each with their own very strong sense of ethnic allegiance.

The following groups are the country's largest and most politically influential: the Hausa in the north (21% of the population), the Yoruba in the southwest (21%), the Igbo, also referred to as the Ibo, in the southeast (20%), and the Fulani in the north (9%). The larger of the minor groups that make up the remaining population include the Tiv, Kanuri, Igala, Idoma, Igbirra and Nupe in the north; the Ijaw, Ibibio, Efik and Ekoi in the east; and the Edo, Urhobo and Itsekiri in the west.

## **3.2 METHODS OF ANALYSIS**

Secondary data will be used from National HIV & AIDS and Reproductive health survey (NARHS plus II, 2012). This is a cross-sectional study covering sampled households and among men and women of reproductive age in all the 36 states and the federal capital territory (FCT). Primary data in the form of in-depth interview was done to complement the secondary data.

## **3.3 DATA COLLECTION**

For the in-depth interview, people that will be interviewed will be taken from one of the states in Nigeria. 7 women were interviewed for the in-depth interview.

### **3.4 STUDY POPULATION**

35,520 households and 35,520 individual respondents were selected for final interview of which 32,190 households (91%) and 31,235 individuals (88%) were successfully interviewed; resulting in a 2.5% non-response rate. A total of 24,152 of the individuals that responded to the interview (which represent 78%) were successfully tested for HIV. The population for this 2012 national HIV&AIDS and Reproductive Health and serological survey (NARHS Plus) was drawn from all females aged between 15 and 49 years and males aged 15 and 64 years living in regular households in rural and urban areas in Nigeria. This research focuses on women in the reproductive ages 15-49. It is a national survey.

### **3.5 SAMPLING METHOD**

Probability sampling was used for the survey. Multi-stage cluster sampling method was used to select eligible persons with known probability. Stage 1 involved the selection of rural and urban localities. Stage 2 involved the selection of Enumeration Areas (EA) within the selected rural and urban localities. Stage 3 involved the listing and selection of households while Stage 4 involved selection of individual respondents for interviewing and testing. Overall, 35,520 households and 35,520 individual respondents were selected for final interview of which 32,190 households (91%) and 31,235 individuals (88%) were successfully interviewed; resulting in a 2.5% non-response rate. A total of 24,152 of the individuals that responded to the interview (which represent 78%) were successfully tested for HIV.

### **3.6 VARIABLES**

- Dependent Variable: risk of HIV infection which is measured by their HIV status
- Independent Variable: intimate partner variable measured with refusal to have sex with him, other forms of violence and violence seen as socially acceptable

- Intervening Variables: Behavioral factor which is measured with multiple sexual partners, age at first sex, age at first marriage or start living with partner and socio-demographic factors such as age, marital status, education and religion.

### **3.7 DATA ANALYSIS**

The secondary data was analyzed using STATA. For the univariate analysis, frequency distribution and percentages of the variables was gotten. For the Bivariate analysis, chi-square was used to check for the relationship between variables and for the Multivariate analysis, binary logistic regression was used because the dependent variable is dichotomous (HIV status: positive or negative).

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND DISCUSSION

#### 4.0. INTRODUCTION

This chapter shows the various method of analysis, presentation of the result that was found during the analysis and the interpretations for the Qualitative and Quantitative. The research Hypothesis generated in the study was tested using a Pearson Chi-Square Statistical Techniques at 0.05 level of significance.

#### 4.1. UNIVARIATE ANALYSIS

Distribution of respondent socio demographic behavioral characteristics by weighted percentage

Characteristics	frequency	percent (%)
<b>WEALTH</b>		
Low Wealth	8,648	83.38
Middle wealth	1,666	16.06
High wealth	58	0.56
<b>Total</b>	<b>10,372</b>	<b>100.00</b>
<b>Marital Status</b>		
Currently married	7,074	68.58
Living with sexual partner	329	3.19
Never married	2,286	22.16
Ever married	626	6.07
<b>Total</b>	<b>10,315</b>	<b>100.00</b>

<b>Occupation</b>		
Not Working	4,994	48.10
Working	5,388	51.90
<b>Total</b>	<b>10,382</b>	<b>100.00</b>
<b>Ages</b>		
15-19	1,508	14.53
20-24	1,857	17.89
25-29	2,046	19.71
30-34	1,565	15.07
35-39	1,250	12.04
40-44	1,121	10.80
45-49	1,035	9.97
<b>Total</b>	<b>10,382</b>	<b>100.00</b>
<b>Religion</b>		
Islam	3,848	37.09
Christianity	6,430	61.97
Other	98	0.94
<b>Total</b>	<b>10,376</b>	<b>100.00</b>
<b>Zones</b>		
North Central	1,955	18.83
North East	1,547	14.90
North West	1,623	15.63
South East	1,567	15.09
South South	1,898	18.28
South West	1,792	17.26

<b>Total</b>			<b>10,382</b>	<b>100.00</b>
<b>Educational Attainment</b>				
Qur'anic only		494		6.64
Primary		1,909		25.66
Secondary		4,021		54.05
Higher		1,015		13.64
<b>Total</b>		<b>7,439</b>		<b>100.00</b>
<b>Age at first marriage/stay with partner</b>				
<15 years		881		10.99
15-24years		5,353		66.77
25-34years		864		10.78
35-49years		34		0.42
Don't know		866		10.80
Don't remember		19		0.24
<b>Total</b>		<b>8,017</b>		<b>100.00</b>
<b>Age at first sex</b>				
<15 years		977		9.45
15-24years		6,583		63.67
25-34years		417		4.03
35-49years		4		0.04
Don't know		1,234		11.9
Don't remember		1,125		10.88
<b>Total</b>		<b>10,340</b>		<b>100.00</b>
<b>Condom ever broken while having sex</b>				



Yes	342	18.65
No	1,387	75.63
Can't remember/Don't know	105	5.73
<b>Total</b>	<b>1,834</b>	<b>100.00</b>
<b>Ever used male condom</b>		
Yes	1,832	25.81
No	5,205	73.34
No response	60	0.85
<b>Total</b>	<b>7,097</b>	<b>100.00</b>
<b>Other forms of violence</b>		
Yes	752	7.33
No	8,527	83.09
Don't know	983	9.58
<b>Total</b>	<b>10,262</b>	<b>100.00</b>
<b>She refuses sex with him</b>		
Yes	5,524	53.73
No	4,757	46.27
<b>Total</b>	<b>10,281</b>	<b>100.00</b>
<b>Multiple sexual partners</b>		
Yes	7,105	69.09
No	3,178	30.91
<b>Total</b>	<b>10,283</b>	<b>100.00</b>
<b>Ever heard of HIV/AIDS</b>		
Yes	9,440	91.31
No	898	8.69

<b>Total</b>	<b>10,338</b>	<b>100.00</b>
<b>HIV test result</b>		
Positive	384	3.70
Negative	9,998	96.30
<b>Total</b>	<b>10,382</b>	<b>100.00</b>

**Source:** *NARHS 2012*

The percentage distribution of sampled respondents revealed that those that belong to the category of low wealth have the highest percentage of 83.38% while those in the middle wealth category have 16.06%, and high wealth has the least which is 0.56%. In the marital status, the currently married have the highest percentage of 68.58% while those living with sexual partner have the least percentage of 3.19%. Occupations 48.10% were working while 51.90% are not working. Age 25-29 have the highest percentage of 19.71% while age groups 45-49 have the least percentage of 9.97%. The respondents were mostly Christian because Christianity has the highest which is 61.97% followed by Islam which is 37.09% and the least are those that belong to other religion which is 0.94%. The North central has the highest percentage of women which is 18.83% and the least in South-South 18.28%. The highest level of education attended is secondary with the percentage of 54.05%, only 13.64% attended higher than secondary school i.e. tertiary institution whereas 6.64% which is the least attended Qur'anic only.

Women aged 15-24 (66.77%) have started living with partner or husband which is the highest percentage while the least are those that do not remember the age which is 0.24%. 63.67% of respondent had their first sex at age 15-24 which is the highest percentage while 0.04% had their first sex at age 35-49years which is the least percentage. 75.63% said condom has never broken while they were having sex while 18.65% said condom have broken while they were having sex. 25.81% respondent say they have used male condom while 73.34% say they have

not used male condom before. 7.33% of women experience other form of violence while 83.09% do not experience violence. 53.73% of women were assaulted or experienced violence as a result of refusal to have sex with their spouse while 46.27% women did not experience violence as a result of sex refusal. 69.09% of respondent said their spouse have multiple sexual partners while 30.91% of respondents said their spouse is faithful.

Respondents have heard of HIV or AIDS (91.31%) while 8.69% have not heard of HIV or AIDS. 3.70% of the respondents are HIV positive while 96.30% are negative.

#### 4.2. BIVARIATE ANALYSIS

Distribution of respondent socio demographic behavioral characteristics by HIV status

Variables	HIV status		Total
	Positive	Negative	
<b>Wealth</b>			
Low Wealth	323 (3.73)	8,325 (96.27)	8,648 (100.00)
Middle wealth	59 (3.54)	1,607 (96.46)	1,666 (100.00)
High wealth	2 (3.45)	56 (96.55)	58 (100.00)
Total	384 (3.70)	9,988 (96.30)	10,372 (100.00)
Pearson $\chi^2$ (2) = 0.1573 Pr = 0.924			
<b>Occupation</b>			
Not Working	165 (3.30)	4,829 (96.70)	4,994 (100.00)
Working	219 (4.06)	5,169 (95.94)	5,388 (100.00)
Total	384 (3.70)	9,998 (96.30)	10,382 (100.00)
Pearson $\chi^2$ (1)=4.2097 Pr=0.040			
<b>Age</b>			
15-19	43 (2.85)	1,465 (97.15)	1,508 (100.00)
20-24	65 (3.50)	1,792 (96.50)	1,857 (100.00)
25-29	88 (4.30)	1,958 (95.70)	2,046 (100.00)
30-34	71 (4.54)	1,494 (95.46)	1,565 (100.00)
35-39	43 (3.44)	1,207 (96.56)	1,250 (100.00)
40-44	35 (3.12)	1,086 (96.88)	1,121 (100.00)
45-49	39 (3.77)	996 (96.23)	1,035 (100.00)

Total	384 (3.70)	9,998 (96.30)	10,382 (100.00)
Pearson	$\chi^2 (6)=9.7091$		Pr=0.137
Marital status			
Currently married	247 (3.49)	6,827 (96.51)	7,074 (100.00)
Living with sexual partner	18 (5.47)	311 (94.53)	329 (100.00)
Never married	79 (3.46)	2,207 (96.54)	2,286 (100.00)
Ever married	37 (5.91)	589 (94.09)	626 (100.00)
Total	381 (3.69)	9,934 (96.31)	10,315 (100.00)
Pearson	$\chi^2 (3)=12.7457$		Pr=0.005
Religion			
Islam	116 (3.01)	3,732 (96.99)	3,848 (100.00)
Christianity	266 (4.14)	6,164 (95.86)	6,430 (100.00)
Other	2 (2.04)	96 (97.96)	98 (100.00)
Total	384 (3.70)	9,992 (96.30)	10,376 (100.00)
Pearson	$\chi^2 (2)=9.2732$		Pr=0.010
Educational attainment			
Qur'anic only	15 (3.04)	479 (96.96)	494 (100.00)
Primary	86 (4.50)	1,823 (95.50)	1,909 (100.00)
Secondary	162 (4.03)	3,859 (95.97)	4,021 (100.00)
Higher	36 (3.55)	979 (96.45)	1,015 (100.00)
Total	299 (4.02)	7,140 (95.98)	7,439 (100.00)
Pearson	$\chi^2 (3) = 2.9926$		Pr = 0.393
Age at first marriage or stay with intimate partner			
<15 years	31 (3.52)	850 (96.48)	881 (100.00)
15-24years	190 (3.55)	5,163 (96.45)	5,353 (100.00)
25-34years	37 (4.28)	827 (95.72)	864 (100.00)
35-49years	1 (2.94)	33 (97.06)	34 (100.00)
don't know	40 (4.62)	826 (95.38)	866 (100.00)
Don't remember	0 (0.00)	19 (100.00)	19 (100.00)
Total	299 (3.73)	7,718 (96.27)	8,017 (100.00)
Pearson	$\chi^2 (5) = 4.0311$		Pr = 0.545
Age at first sex			
<15 years	36 (3.68)	941 (96.32)	977 (100.00)
15-24years	261 (3.96)	6,322 (96.04)	6,583 (100.00)
25-34years	15 (3.60)	402 (96.40)	417 (100.00)
35-49years	0 (0.00)	4 (100.00)	4 (100.00)
Don't know	26 (2.11)	1,208 (97.89)	1,234 (100.00)
Don't remember	42 (3.73)	1,083 (96.27)	1,125 (100.00)
Total	380 (3.68)	9,960 (96.32)	10,340 (100.00)
Pearson	$\chi^2 (5)=10.3030$		Pr=0.067
Condom ever broken			
Yes	16 (4.68)	326 (95.32)	342 (100.00)
No	61 (4.40)	1,326 (95.60)	1,387 (100.00)

Can't remember/Don't know	5 (4.76)	100 (95.24)	105 (100.00)
Total	82 (4.47)	1,752 (95.53)	1,834 (100.00)
Pearson $\chi^2 (2)=0.0725$ Pr=0.964			
Ever used male condom			
Yes	82 (4.48)	1,750 (95.52)	1,832 (100.00)
No	227 (4.36)	4,978 (95.64)	5,205 (100.00)
No response	1 (1.67)	59 (98.33)	60 (100.00)
Total	310 (4.37)	6,787 (95.63)	7,097 (100.00)
Pearson $\chi^2 (2) = 1.0999$ Pr = 0.577			
Other forms of violence			
Yes	21 (2.79)	731 (97.21)	752 (100.00)
No	315 (3.69)	8,212 (96.31)	8,527 (100.00)
Don't know	43 (4.37)	940 (95.63)	983 (100.00)
Total	379 (3.69)	9,883 (96.31)	10,262 (100.00)
Pearson $\chi^2 (2) = 2.9973$ Pr = 0.223			
She refuses sex with him			
Yes	233 (4.22)	5,291 (95.78)	5,524 (100.00)
No	146 (3.07)	4,611 (96.93)	4,757 (100.00)
Total	379 (3.69)	9,902 (96.31)	10,281 (100.00)
Pearson $\chi^2 (1)=9.5005$ Pr=0.002			
Multiple sexual partners			
Yes	264 (3.72)	6,841 (96.28)	7,105 (100.00)
No	116 (3.65)	3,062 (96.35)	3,178 (100.00)
Total	380 (3.70)	9,903 (96.30)	10,283 (100.00)
Pearson ( $\chi^2$ ) = 0.0266 Pr = 0.871			

The bivariate analysis showed varied levels of significance using the Chi square test of independence. Respondents that belong to the category of low wealth (3.73%) are HIV positive while those that belong to high wealth, 3.45% are positive. The chi-square results of ( $\chi^2=0.1573$ , Pr = 0.924) statistically shows that there is no relationship between wealth category and the respondents HIV status. Respondents that are not working (3.30%) are HIV positive while those that are working, 4.06 % are HIV negative. The Chi square results of ( $\chi^2=4.1046$ , P=0.043) statistically shows that there is a relationship between occupation and the respondent HIV status. Respondents in the age group of 30-34 have the highest percentage of women that are HIV positive (4.54%) compared to those that are in other Age groups. The Chi square

results of ( $\chi^2= 9.7091$ , Pr = 0.137) statistically shows that there is no relationship between age and the respondents HIV status. Respondents that are living with sexual partners (5.47%) are HIV positive while 3.46% of women that were never married are HIV positive. The Chi square results of ( $\chi^2= 12.7457$  Pr = 0.005) statistically shows that it is significant. Respondents that are Christians have the highest percentage of HIV positive (4.14 %) women compared to other religion. The Chi square results of ( $\chi^2= 9.2732$ , Pr = 0.010) statistically shows that there is a relationship between religion and the respondents HIV status. Respondents that attended secondary have highest percentage (4.50%) of HIV positive women. The Chi square results of ( $\chi^2= 2.9926$ , Pr = 0.393) statistically shows that there is no relationship between education attainment and the respondent HIV status.

Respondents who do not know their age at first stay/ living with partner (4.62%) have the highest percentage compared to those in other age groups. The Chi square results of ( $\chi^2= 4.0311$ , Pr = 0.545) statistically shows that there is no relationship between age at first marriage or stay with intimate partner and HIV status.

Respondents who had their first sex at age 15-2 have the highest percentage of women (3.96%) that are HIV positive compared to those that know their age at first sex. The Chi square results of ( $\chi^2=10.3030$  Pr = 0.067) statistically shows that there is no relationship between the age at first sex and HIV status. Women who can't remember whether condom has ever broken 4.76% are HIV positive while 4.68% of women have not experienced it and are HIV positive. The Chi square results of ( $\chi^2= 0.0725$  Pr = 0.964) statistically shows that there is no relationship between condom ever broken while having sex and HIV status. 4.48% of respondents say they have ever used male condom were HIV positive. The Chi square result of ( $\chi^2=1.0999$  Pr = 0.577) statistically shows that there is no relationship. 2.79% of women that have experience due to some reasons are HIV positive while 3.69 of the respondents were negative ( $\chi^2=2.9973$

Pr = 0.223) statistically shows that there is no relationship. 4.22% of women who were assaulted because they refuse to have sex with their husband/partner due to some reasons were HIV positive. The Chi square result of ( $\chi^2= 9.5005$  Pr = 0.002s) statistically shows that there is a relationship. 3.72% of women who claim that their intimate partner sleep with other women are HIV positive while 3.65% of those that claim that their husband/partner is faithful are HIV positive. The Chi square result of ( $\chi^2= 0.0266$  Pr = 0.871) shows that it is statistically not significant.

### 4.3. LOGISTIC REGRESSION

HIV Status	Q	P>z	[95% Conf.Interval]
Occupation			
Not working	1.0 (RC)		
Working	1.008	0.949	0.8020-1.2658
Marital status			
Currently married	1.0 (RC)		
Living with sexual partner	0.866	0.576	0.5235-1.4331
Never married	1.383	0.062	0.9844-1.943118
Ever married	0.579	0.004*	0.3981-0.8420
Ages			
15-19years	1.0 (RC)		
20-24years	3.326	0.000***	2.4275-4.5566
25-29years	2.969	0.000***	2.1875-4.0310
30-34years	2.966	0.000 ***	2.1203-4.1498
35-39years	4.048	0.000***	2.7290-6.0035
40-44years	4.892	0.000***	3.1937-7.4931

45-49years	4.042	0.000***	2.6608-6.1395
Religion			
Islam			
Christianity	0.956	0.693	0.7622-1.1979
Other	1.901	0.375	0.4597-7.8602
Refuses sex with him			
Yes	1.0 (RC)		
No	1.590	0.000***	1.2890-1.9612
Other form of violence			
Yes	1.0 (RC)		
No	3.136	0.000***	2.5079-3.9204
Don't know	2.659	0.000***	1.8495-3.8239
Age at first sex			
<15 years	1.0 (RC)		
15-24	2.496	0.000***	1.9715-3.1599
25-34	2.465	0.003**	1.3697-4.4354
35-49	1	-	-
Don't know	7.752	0.000***	4.7118-12.7553
Don't remember	2.535	0.000***	1.7389-3.6962
Multiple sexual partners			
Yes	1.0 (RC)		
No	1.092	0.452	0.8682-1.3738

Note: \* when  $P < 0.05$ , \*\* when  $p < 0.01$  & \*\*\* when  $p < 0.001$

At the multivariate stage the likelihood ratio of occupation of respondents revealed an insignificant relationship as odds ratio of working (OR=1.008,  $p > 0.05$ ) this shows that respondents working are as likely to have HIV as those not working.



The likelihood ratio of marital status of respondents revealed a significant and insignificant relationship as odd ratio of living with sexual partner (OR=0.866,  $p>0.05$ ) this shows that the respondents are less likely to have HIV as those that are currently married. Odds ratio of women that were never married (OR=1.383,  $p>0.05$ ) this shows that respondents are as likely to have HIV as those that are currently married. Odds ratio of women that were ever married (OR=0.579,  $p<0.05$ ) this shows that respondents are less likely to have HIV as those that are currently married.

The likelihood ratio of age of respondents revealed a significant relationship as odds ratio of age 20-24(OR=3.326,  $p<0.001$ ) this shows that respondents of age 20-24 are more likely to HIV than those in age 15-19. Odds ratio of age 25-29(OR=2.969,  $p<0.001$ ) this shows that respondents of age 25-29 are more likely to have HIV than those in age 15-19. Odds ratio of age 30-34(OR=2.966,  $p<0.001$ ) this shows that respondent of age 30-34 are more likely to have HIV than those in age 15-19. Odds ratio of age 35-39(OR=4.048 $p<0.001$ ) this shows that respondent of 35-39 are more likely to have HIV than those in age 15-19. Odds ratio of age 40-44(OR=4.892,  $p<0.001$ ) this shows that respondent age 40-44 are more likely to have HIV than those in age 15-19. Odds ratio of age 45-49(OR=4.042,  $p<0.001$ ) this shows that respondent age 45-49 are more likely to have HIV than those in age 15-19 and it is statistically significant.

The likelihood ratio of religion of respondents revealed an insignificant relationship (OR=0.956,  $p>0.05$ ). This shows that Christians are less likely to have HIV than Islam. Odds ratio of other religions (OR=1.901,  $p>0.05$ ) this shows that those respondents that are other religions are more likely to have HIV than Islam.

The likelihood ratio of respondents that experienced violence as a result of refusing sex with the partner revealed a significant relationship as odds ratio of those that did not experience violence as a result of refusing sex with him (OR=1.590,  $p<0.001$ ) this shows that those

respondents are more likely to have HIV as those that experienced violence as a result of refusal of sex with him and it is statistically significant.

The likelihood ratio of age at first sex of respondents revealed a significant relationship as odds ratio of age 15-24(OR= 2.496,  $p<0.001$ ) this shows that respondents of age 15-24 are more likely to have HIV than those in ages  $<15$ . Odds ratio of age 25-34(OR= 2.465,  $p<0.01$ ) this shows that respondents of age 25-34 are more likely to have HIV than those in ages  $<15$ . Odds ratio of age 35-49(OR= 1,) this shows that respondent of age 30-49 are as likely to have HIV as those in ages  $<15$ . Odds ratio of those who do not know their age at first sex (OR= 7.752,  $<0.001$ ) this shows that respondent who do not know their age at first sex are more likely to have HIV than those in ages  $<15$ . Odds ratio of those who do not remember their age at first sex (OR= 2.535,  $p<0.001$ ) this shows that respondents that do not remember their age at first sex are more likely to have HIV than those in ages  $<15$  and it is statistically significant.

The likelihood ratio of respondents that say their intimate partners have multiple sexual partners revealed an insignificant relationship as odds ratio of those that do not have multiple sexual partners (OR= 1.092,  $p>0.05$ ) this shows that respondent who do not have multiple sexual partners are less likely to have HIV as those that have multiple sexual partners and its statistically significant.

#### **4.4. ANALYSI OF IN-DEPTH INTERVIEW**

Perception of intimate partner violence and risk of HIV among women in Nigeria

##### **Socio demographic behavioral analysis**

All the respondents are between the ages of 21-29. 57.14% of the respondent attended higher education such as university and college, 28.57% attended secondary while 14.29% attended

primary. The occupations of the respondents are hair dressing, fashion designing, copper, applicant and student. Two out of the respondents are not married but are living with sexual partners while the other 5 are married. One of the respondent had their first sex after marriage (,29) while the other 3 had it before marriage (24, 24 & 25 years) those that are cohabiting with their partners had their first sex at the age of 18 & 23 years. Although one respondents refused to answer that question.

### **Question 1**

Do you think that a man should show his wife/partner that he is in control by beating or bullying her? Should a man beat his wife/ partner if she disobeys him or does something he doesn't like?

Answer

Most of the respondents are against the saying that a man should show his wife/partner that he is control by beating or bullying or may be beat his wife/partner if she disobeys him or does something he doesn't like.

Respondent 4 (25 years and a copper) said;

*We don't have an equal right. Man is the head and should not exercise headship in an abnormal way. A man is a dictator and women compliment and if there is crises it should be settled amicably instead of resulting into abuse or beating the wife which is assault.*

Respondent 1(28 years, an applicant and a hair dresser) said;

*Is not ideal and nobody will pray to get married to a man that assault his wife/ partner if she disobeys him.*

## **Question 2**

Has your husband/partner ever assaulted or attacked you, or been violent towards you? What was the reason for his aggression? If yes, in what way

### ***Answer***

Most of the respondent interviewed claimed not to have experienced any form of assault except 1 respondent.

Respondent 3 (24 years and a student)

*“I was slapped by Him because I disobeyed him and as a result of that refused to have sex with him. He was angry and he slapped me and left”. “I was also violated because of pregnancy from my partner (not married). He wanted me to keep the pregnancy but I refused because I’m still schooling”*

## **Question 3**

Do you use condom during sex and have you heard of female condom?

## **Answer**

Almost all the respondent does not use condom during sex only two respondent use condom and 3 have heard about female condom and only two claim to have used it.

Respondent 7 (26 years and a fashion designer) says she has never used condom before

*“I just got married and I’m new to all these thing as you can see I’m pregnant”*

Respondent 5(29 years a house wife and still schooling) says;

*“I have never used condom since I got married”* but this respondents’ age at first sex is two years before she got married. This shows that she was using condom during sex before she got married and stopped using it after she got married.

Respondent 4(25 years and a cop member) said

*“I have heard of female condom before because I was a peer educator but not used it”*. She has no reason for not using it.

## **Question 4**

Do you know if your husband/partner sleeps with or has ever slept with other woman and what do you think about condom use with your husband/partner? If you found out that he has been unfaithful could you be able to insist that he uses condoms?

### **Answer**

Almost all the respondents claim their husbands/ partners are faithful (5) and don't need advice on condom use.

Respondent 6(26 years and a fashion designer) says;

*"I trust him; he won't sleep around somehow I can suggest condom to him"*

*Respondent 4(25 years and a copper) says;*

*"I can advise my husband to use condom if he sleeps around"*

### **Answer 2**

A respondent (respondent 5, 29 years a house wife and still schooling) gave a different answer to the above question. She said *"you can't say if he has multiple sexual partners because men are unpredictable but you can only advise him to stop but if you suggest condom it seems you are given up on him or encouraging him. I trust my husband"*

#### **4.5. Testing of Research Hypothesis**

The bivariate analysis in table 2 shows the test of hypothesis raised in this study. The research Hypothesis generated in the study was tested using a Pearson Chi-Square Statistical Techniques at 0.05 level of significance.

##### **Hypothesis 1**

H0: socio-demographic behavioral characteristics of women do not influence HIV infection.

H1: socio-demographic behavioral characteristics of women may influence HIV infection.

##### **Decision**

##### **HIV status and socio-demographic behavioral characteristics**

The results show that variables such as occupation with Chi-Square ( $\chi^2=4.2097$ ,  $p=0.040$ ), marital status ( $\chi^2=12.7457$ ,  $p=0.040$ ), religion ( $\chi^2=9.2732$ ,  $p=0.010$ ), are significantly related to HIV status at p-value  $<0.05$ . Therefore, we fail to accept the null hypothesis and conclude that occupation, marital status and religion has significant influence on HIV infection. In logistic regression age and age at first sex were found to be statistically significant.

Wealth index ( $\chi^2=0.1573$ ,  $p=0.924$ ), age ( $\chi^2=9.7091$ ,  $p=0.137$ ), educational attainment ( $\chi^2=2.9926$ ,  $p=0.393$ ), age at first marriage ( $\chi^2=4.0311$ ,  $p=0.545$ ), age at first sex ( $\chi^2=10.3030$ ,

p=0.067), condom ever broken ( $\chi^2=0.0725$ , p=0.964) are not significantly related to HIV status at p-value<0.05. Therefore, we accept the null hypothesis and conclude that wealth index, age, educational attainment, age at first marriage, age at first sex, and condom ever broken have no influence on HIV infection

### **Hypothesis II**

H0: Intimate partner violence does not influence women's HIV infection.

H1: intimate partner violence may influence women's HIV infection

### **Decision**

Refuses sex with him ( $\chi^2=9.5005$ , P=0.002) is significantly related to HIV status at p-value<0.05. Therefore, we fail to accept null hypothesis and conclude that refusing sex with him has significant influence on HIV infection. In the logistic regression refuses sex with him and other form of violence were found to be statistically significant.

Other forms of violence ( $\chi^2=2.997$ , P = 0.223) and multiple sexual partner ( $\chi^2=0.0266$ , P=0.871) are not significantly related to HIV status at p-value<0.05. Therefore, we accept null hypothesis and conclude that other forms of violence and multiple sexual partner have no influence on HIV infection.

## **DISCUSSION OF FINDINGS**



Intimate partner violence occurs between two people in an intimate relationship that is people that are dating, married or cohabiting. Although both men and women experience IPV but men are mostly the perpetrators and women the victims. IPV among women especially antenatal clients has a vast effect such as maternal mortality and AIDS-related mortality, mental disorders, unsafe abortion and adverse birth outcomes, including low birth weight, preterm delivery and small for gestational age which ends up affecting the health of the child and also the mother. People at younger ages (15-49) are at risk of HIV especially women. Research and statistics has proven over time that women have the highest rate of the human immunodeficiency virus.

In the analysis above it was found that there is a significant relationship between women that have experienced one form of violence and their risk of having HIV (their status). Therefore, it supports other research that says that women in relationships with violence have a higher risk of contracting HIV compared to women in relationship without violence. Religion and age as part of the socio-demographic factor was also seen to be an indicator of HIV infection.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.0. INTRODUCTION

This study examined the perception of intimate partner violence and risk of HIV among women in Nigeria. This chapter summarizes the findings and conclude base on the result of the findings made.

#### 5.1. Summary

This study analyzed data from National HIV & AIDS and Reproductive health survey (NARHS plus II, 2012) collected by collected by the Federal Ministry of Health. Univariate analysis was done using frequency distribution to describe the background characteristics of the respondent. Bivariate analysis was done using Chi square to test the association between the HIV status of respondent and the socio-demographic behavioral characteristics of respondents and association between HIV status and violence was tested. Logistic regression was also used in the multivariate analysis to determine the strength of the association. And identify factors that increase the risk of HIV infection.

Intimate partner violence is seen as the most common type of violence among women although the type of violence experienced differs. Intimate partner violence is a frequent experience among women in all regions and cultures in Nigeria and women aged 15-49 are at higher risk. In the data used violence was categorized into refusal to have sex and others which was seen in the univariate analysis that about 53.73% of women were assaulted because she refuses to have sex with him. This shows that prevalence of IPV in Nigeria is very high with over 50%.