UNMARRIED YOUTHS' KNOWLEDGE OF HUMAN-IMMUNO DEFICIENCY VIRUS AND PERCEPTIONS OF MANDATORY PRE-MARITAL HIV TESTING IN IBADAN NORTHWEST LOCAL GOVERNMENT AREA

BY

OLUMIDE ADETOLA ADEFIOYE

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DEDICATION

I dedicate this work to the Almighty God whose faithfulness I have enjoyed without measure. To Him alone be the glory.

ABSTRACT

The Human Immuno-deficiency Virus (HIV) infection remains a public health concern in Nigeria. To prevent further transmission of the virus, some religious organizations have started promoting Mandatory Premarital HIV Testing (MPHT). However, the perceptions of unmarried youths who are the primary targets of this strategy are often ignored. This study, therefore, assessed unmarried youths' level of HIV knowledge and perceptions relating to MPHT in Ibadan Northwest Local Government Area.

The study was a cross-sectional survey. A three-stage sampling technique was used to select 571unmarried youths aged 15-24 years from households. A Focus Group Discussion (FGD) guide was used to conduct six FGDs while a validated questionnaire with a 14-point knowledge scale was used for the collection of quantitative data. The FGD data were analyzed using the thematic approach while the quantitative data were analyzed using descriptive and Chi-square statistics.

The mean age of respondents was 20.6 ± 2.6 years with 52.0% being males. Majority had senior secondary education (52.7%) followed by those with tertiary (31.8%), junior secondary (10.3%), primary (4.4%) and no formal education (0.7%). Mean knowledge score on HIV transmission and prevention was 12.0 ± 1.7 out of a maximum of 14 points. More than half (56.2%) were aware of HIV testing centers in Ibadan and 45.4% could mention at least one. Eighty percent were aware of MPHT for intending couples. Awareness of MPHT was significantly higher among Christians (85.6%) than Muslims (65.4%) ($p<0.05$). Nineteen percent of the respondents were of the perception that MPHT was not a good tool for detecting HIV infection. Majority (82.8%) believed that MPHT could reduce the spread of HIV. Sixty percent were of the opinion that MPHT could reduce sexual promiscuity. Only 25.2% perceived MPHT as a violation of human rights. Sixty-two percent preferred premarital HIV testing in government-owned hospitals. Twenty-eight percent of those who preferred private health facilities were of the opinion that confidentiality would be better maintained in such facilities. Majority (70.1%) would prefer a doctor to disclose HIV test results to intending couples. Majority of the FGD

participants opined that the spread of HIV could be reduced through MPHT. A central belief among the discussants was that refusal to go for MPHT by anyone was an indication of HIV sero-positivity.

This study revealed a high knowledge of HIV/AIDS as well as a high awareness and positive perception of mandatory pre-marital HIV testing among unmarried youths. The sustenance of positive perceptions of mandatory pre-marital HIV testing among unmarried youths should be promoted through youth-friendly educational strategies.

Key words: Unmarried, youths, mandatory pre-marital HIV testing, HIV awareness, perceptions

Word count: 415

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CERTIFICATION

I certify that Mr. Olumide Adetola Adefioye in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, carried out this work.

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Supervisor

Oyedunni S. Arulogun,

B.Ed (Ib), M.Ed (Ib), MPH (Ib), Ph.D (Ib), CCST (Nig)

Senior Lecturer, Department of Health Promotion and Education,

Faculty of Public Health, College of Medicine,

University of Ibadan

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune-Deficiency Syndrome
CCST	Clinical Certification in Speech Therapy
CDC	Centers for Disease Control
CWGL	Center for Women's Global Leadership
ECWA	Evangelical Church of West Africa
FGDs	Focus Group Discussion
FMOH	Federal Ministry of Health
HEAP	HIV/AIDS Emergency Action Plan
HIV	Human Immuno-deficiency Virus
HIV-TC	Human Immuno-deficeincy Virus- Testing and Counselling
HND	Higher National Diploma
ICRW	International Center for Research on Women
IEC	Information, Education and Communication
NACA	National Agency for the Control of AIDS
NARHS	National AIDS and Reproductive Health Survey
NCE	National Certificate of Education
NEACA	National Expert Advisory Committee on AIDS.
NGOs	Non-Governmental Organizations
NIBUCA	Nigeria Business Coalition Against AIDS
OND	Ordinary National Diploma
OSI	Open Society Institute
PEPFAR	President's Emergency Plan For AIDS Relief
RNA	Ribo-oxy Nuclei Acid
SACA	State Action Committee on AIDS
SPSS	Statistical Package for Social Sciences
SSCE	Senior Secondary School Certificate
SUWA	Scripture Union West Africa
UDHR	Universal Declaration of Human Rights

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UN	United Nations
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UNFPA	United Nations Fund for Population Activities
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Operational Definition of Terms

1. Perception: The attitude and opinion about an issue based on what is observed or thought
2. Premarital HIV testing: HIV test of intending couples that takes place before the marriage
3. Unmarried: Single and never married, not co-habiting and not a single parent
4. Youth: A youth as defined by the United Nations is someone between the ages of 15-24
5. Mandatory: Requirement or a necessary condition

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CHAPTER ONE

INTRODUCTION

1.0 Background to the study

There is no doubt that one of the biggest health problems threatening the human race in recent times is the HIV/AIDS pandemic. The disease has continued to be in the front burner for many years now, despite initial denials and cover-ups by some countries. Presently 33 million people worldwide are living with HIV according to the UNAAIDS 2008 report. Sub-Saharan Africa with just over 10 percent of the world's population (UNDP, 2004) has the greatest burden of this disease. It is estimated that close to two-thirds of all people living with HIV are in sub Saharan Africa with South Africa having about 5.7m million people living with HIV/AIDS-the largest in Africa (UNAIDS, 2008). The HIV/AIDS pandemic has significantly affected the gains, which has been made in the area of health and development in many African countries over the years and has also reduced the quality of life. Over the past 10 years, AIDS has erased improvements in life expectancy (National Population Commission, 2003). According to UNAIDS (2008) with AIDS claiming so many people's lives, Nigeria's life expectancy has declined. In 1991, the average life expectancy was 53.8 years for women and 52.6 years for men (WHO, 2008). In 2006, these figures had fallen to 49 for women and 48 for men. The disparity between what should have been and what will exist will worsen further if the HIV prevalence is allowed to rise further and the epidemic is not adequately controlled (Federal Government of Nigeria, 2003).

Consequently, the HIV/AIDS situation in Nigeria is unpleasant as Nigeria is said to be on the threshold of a major HIV epidemic. The 2005 HIV sero-prevalence survey showed a national prevalence of 4.4%, down from 5% in 2003.This makes it the second consecutive time Nigeria would experience a decline in HIV prevalence. However, the drops in prevalence does not mean that the spread has been effectively curtailed (Abass,

2006). Infact, because of Nigeria's huge population, the HIV prevalence rate though lower than many countries in Africa makes the number of infected people higher than countries with higher prevalence but with lower population. According to UNAIDS (2006), Nigeria has the third largest population of people living with HIV in the world. There are nearly 2.9 million adults and 250,000 children under the age of fourteen living with HIV in Nigeria (FMOH, 2006). The UNAIDS 2008 report on global AIDS revealed that the National HIV prevalence rate among adults (15-49 years) was 3.1% and that the adults and children (0-49 years) living with HIV at the end of year 2007 were 2.6 million. The report also showed that deaths due to AIDS in 2007 in Nigeria were 170,000 while children orphaned by AIDS at the end of year 2007 were 1.2 million.

Though it was only in 1986 that the first HIV case was recorded in Nigeria, the initial apathy and inaction of Nigeria has contributed greatly to the increase. The initial response in the late 80s was denial and the public sector response was limited to setting up of a national committee and poor funding of the response (UNFPA, 2005). According to Kanki and Adeyi (2006), the Nigerian government was slow to respond to the increasing rates of HIV transmission at the initial stage. It was only in 1991 that the Federal Ministry of Health made their first attempt to assess the Nigerian HIV/AIDS situation. By about 1994, government support for the AIDS programme had disappeared and international organizations withdrew their support for political reasons (Orubuloye and Oguntimehin, 1999). Government has since moved from the stage of denial to developing a national policy on HIV/AIDS. Other measures include the constitution of a presidential council on AIDS in 1999, the establishment of the National Committee (now Agency) for the Control of AIDS, (NACA), and development of a National HIV/AIDS policy guideline for Voluntary Counselling and Testing among other steps.

The initial denial and poor response was also evident in the religious circles. Adeokun (2006) reported that early in the epidemic, the prevailing view among religious leaders was that God had sent AIDS as a punishment for sexual sins and other moral failings. Approximately 80% of HIV in Nigeria is transmitted through unprotected heterosexual sex. According to UNAIDS (2008), 80% of HIV infections in Nigeria are transmitted through heterosexual sex. Leaders in both the Christian and Muslim communities discourage their followers from premarital and extramarital sex. The two

holy books are filled with examples and instructions concerning the use of sexuality and the adherents of the two popular religions are expected to abide by these instructions Therefore, religious leaders probably did not see HIV/AIDS as a problem in their domain. This could be the reason for the initial apathy by the two religions. However, the situation has changed. AIDS is affecting the religious community, as many of the people suffering from AIDS are religious people, members of churches and mosques. (McCain, 2003). According to the Scripture Union West Africa (SUWA) (2006), AIDS is already in Christian congregations.

The realization of this fact has led to the active involvement of religious bodies in the fight against HIV/AIDS. Part of the strategy was the coming together of Christian and Muslim faith leaders in April 2002 to draw up a "Declaration of Unity to address HIV/AIDS in Nigeria". In November 2002, the inter-faith HIV/AIDS Council was inaugurated with 5 trustees each from the Christian and Muslim faiths. Apart from this, some denominations under the two religions have also gone ahead to formulate their own HIV/AIDS policies. In the Christian fold, 5 denominations namely; the Baptist Church, the Catholic Church, Church of Christ in Nigeria, ECWA, and the Anglican Church were the first ones to develop HIV/AIDS policies. Some other denominations in both the Christian and Islamic folds have also done the same. A key element in these policies is HIV testing.

Just as the National Agency for the Control of HIV/AIDS and other organizations have been creating awareness especially in the area of the need for people to know their HIV status through voluntary counseling and testing, religious bodies have also been involved in this aspect. Some of them have even gone to the extreme as could be seen in the case of the decision of Covenant University, established by a religious body, to institute compulsory HIV and pregnancy test for her graduating students (Obinna, 2007). Another controversial measure that many of these religious bodies have put in place is mandatory premarital HIV testing for prospective couples that intend to do their marriage in the church or mosque. Mandatory Premarital HIV testing, said to be a useful tool in detecting HIV infection in a seemingly low risk population like intending couples, has had a lot of controversies trailing it.

1.1 Statement of the problem

As the prevalence of HIV increases, the risk of spread through marriage increases, as well as through mother-to-child transmission [Zunyon, Keming, Chen, Wei, and Roger, 2005]. This, and the need to prevent the marriage bed from becoming a death bed through HIV infection, has made some religious organizations to make premarital HIV testing a criterion which prospective couples must meet before they are joined in holy wedlock particularly in churches. The 2003 National HIV/AIDS Reproductive Health Survey showed that 2.4% of the respondents desired to have an HIV test to satisfy mandatory marriage requirement. The percentage rose to 3.0% in the 2005 survey. Most interventions aimed at preventing HIV transmission require individuals to know their HIV status. However, many still shy away from undergoing HIV test. According to Ubuane, Faleyimu, Ajayi and Aremo (2000) voluntary testing is not common in Nigeria. This corroborates the assertion by Chattad (2002) that the main cause of the rapid spread of HIV infection among Nigerian youths is the fact that less than 10% know their HIV status. Umeora and Esike (2005) in a study conducted in Southeastern Nigeria to examine the contribution of premarital HIV screening to HIV detection therefore recommended that screening apparently healthy individuals like intending couples could play an important role in HIV detection in the general population. This may justify the rationale behind the mandatory premarital HIV testing policy of some religious organizations.

The Vanguard Newspaper of July 31, 2007 reported that in response to the compulsory HIV test for students of Covenant University, former director-general of NACA, Prof. B. Osotimehin reiterated the fact that HIV tests should be informed, voluntary, confidential and offered only as a package that includes pre and post-test counseling. However, in most cases, mechanisms are not put in place for effective pre-and post-test counseling/support by many of these organizations. Again, the mandatory nature of the test is against international and national guidelines on HIV testing. Though some religious organizations will want it to be seen as voluntary, the desire not to be seen as being disobedient to religious authorities may leave the prospective couples with no choice than to comply.

In some religious settings, when either of the couples tests positive, the marriage is either suspended or cancelled outright by the clergy of the concerned religious

organization. This is a contravention of Article 16 of the Universal Declaration of Human Rights to which Nigeria is a signatory. This practice also poses a threat to the genuine intention behind HIV screening and could subject the prospective couple, especially the HIV positive partner to social and emotional crisis. While it is clear that HIV testing is important in HIV/AIDS prevention and control, if not well delivered, it could bring about serious complications including stigmatization, irrational decisions, HIV/AIDS spread, fast progression of HIV infection to AIDS and early death (Musa, Akpo, Zakka, Udeoba, and Mershak, 2004). Another important issue to consider is the possibility of desperate people to resort to procuring fake documents that certifies them as HIV negative in order to meet the criterion. This is not impossible in Nigeria where any document can be forged. Already, the incidence of fake HIV negative certificate in pre-marital HIV testing has been documented in Nigeria (Smith and Mbakwem, 2006). This has a grave implication for the control of HIV/AIDS, and also for the state of reproductive health in Nigeria.

1.2 Justification of the study

There have been quite a number of studies on premarital HIV testing in Nigeria and beyond. However, there has been no documented research that explores the perception of unmarried youths towards mandatory premarital HIV testing. Again, previous studies on premarital HIV testing were conducted in the eastern part of the country and focused only on Christian populations. Though mandatory premarital HIV testing in Nigeria is more of a religious issue, it is not limited to Christians or Christian organizations alone. There is the need to fill this gap in knowledge and also as a departure from past studies; this study focuses on unmarried youths from both religions.

There is also the need to take cognizance of the increasing awareness on HIV/AIDS being created by various organizations increasing calls for the institution of mandatory premarital HIV testing as a wedding criterion in religious organizations by religious leaders in both the Islamic and Christian folds in recent times. Of recent, more religious organizations have actually gone ahead to include the test as part of the criteria intending couples must meet before such wedding is conducted in the church or mosque. In addition is the fact that the number of people who desired HIV test to meet marriage requirement rose from 2.4% in 2003 to 3% in 2005 (NARHS, 2005). There is therefore the

need to conduct further study among people who are not married to determine their perception about mandatory premarital HIV testing.

1.3 Research Questions

- What is the level of knowledge of unmarried youths in Ibadan Northwest about the modes of transmission and prevention of HIV/AIDS?
- Are the unmarried youths in Ibadan Northwest Local Government area aware of HIV testing centers in the local government area?
- What is the awareness level of unmarried youths in Ibadan Northwest about mandatory premarital HIV testing?
- What is the perception of unmarried youths in Ibadan Northwest Local Government towards mandatory premarital HIV testing?

1.4 Broad Objective

The broad objective of this study was to document the HIV knowledge and perceptions relating to mandatory premarital HIV testing among unmarried youths in Ibadan Northwest Local Government about.

1.5 Specific Objectives

The specific objectives of this study were to:

- Document the level of knowledge of unmarried youths in Ibadan Northwest Local Government on HIV/AIDS modes of transmission and prevention
- Document the awareness level of unmarried youths on HIV testing centers in Ibadan Northwest Local Government area
- Assess and document the level of awareness of unmarried youths in Ibadan Northwest Local Government about mandatory premarital HIV testing
- Document the perception of unmarried youths in Ibadan Northwest Local Government about mandatory premarital HIV testing

1.6 Hypotheses

- There is no significant relationship between respondents' religion and awareness of mandatory premarital HIV testing
- There is no significant relationship between gender and perception of mandatory premarital HIV testing.
- There is no significant relationship between age group and perception of mandatory premarital HIV testing

CHAPTER TWO

LITERATURE REVIEW

2.1 Aetiology of HIV/AIDS

Acquired Immune Deficiency Syndrome is a fatal disease caused by a retrovirus known as Human Immuno-deficiency Virus (HIV). The virus breaks down the body's immune system, leaving the victim vulnerable to a host of infections, neurological disorders, or unusual malignancies (Parks, 2003). Recognized early as an emerging disease only in the 1980s, HIV/AIDS has rapidly established itself throughout the world. It has evolved from a mysterious illness to a global pandemic that has infected tens of millions. The aetiological agents of the disease are strains of two related retroviruses; human immunodefiency viruses HIV-1 and HIV-2. HIV-1 is the most common in sub-Saharan Africa and throughout the world, while HIV-2 is a more recently recognized virus found in West Africa, parts of Europe and India. The virus, which was named Human Immunodeficiency Virus in May 1986, by the International Committee on Taxonomy, is a protein capsule containing two short strands of genetic material (RNA) and enzymes (Parks, 2003). The virus has the ability to destroy human T4 helper cells. It is also able to spread throughout the body. Once a person is infected, the virus remains in the body life long.

Source of infection: The virus has been found to be in blood and semen. Lower concentrations have been detected in tears, saliva, breast milk, and cervical and vaginal secretions.

Reservoir of infection: The reservoir of infection is in human beings. HIV is a specific virus that only is able to exist in humans. There are similar diseases in other species but HIV is only found in humans

Routes of transmission of HIV: Transmission occurs through four main routes

- Unprotected sexual contact with an infected partner (homosexual or heterosexual contact)
- Transfusion of infected blood or blood products

- Contacts with blood-soiled sharp objects like needles, razors, scarification knives etc
- From infected mother to her baby during pregnancy, delivery, or breast feeding

Incubation period: The incubation period is uncertain and could range from a few months to ten years or more.

2.2 WHO case definition of AIDS in the absence of HIV testing

Weight loss, chronic diarrhea, prolonged fever, persistent cough, etc (Adults and adolescents) Weight loss or abnormal slow growth, chronic diarrhea, prolonged fever, persistent cough, confirmed maternal HIV infection, etc (Children <13years).

2.3 Epidemiology and impact of HIV/AIDS globally

UNAIDS estimated that globally, there were 33 million [30 million–36 million] people living with HIV in 2007 (UNAIDS 2008). The annual number of new HIV infections declined from 3.0 million [2.6 million–3.5 million] in 2001 to 2.7 million [2.2 million–3.2 million] in 2007. Overall, 2.0 million [1.8 million–2.3 million] people died due to AIDS in 2007, compared with an estimated 1.7 million [1.5 million–2.3 million] in 2001. The UNAIDS global report on HIV/AIDS also indicated that women accounted for half of all people living with HIV worldwide. While the proportion of women among people living with HIV has remained stable globally over the last ten years, it has increased in many regions. An estimated 370 000 [330 000–410 000] children younger than 15 years became infected with HIV in 2007. Globally, the number of children younger than 15 years living with HIV increased from 1.6 million [1.4 million 2.1 million] in 2001 to 2.0 million [1.9 million–2.3 million] in 2007. Just like in the time past, Sub-Saharan Africa accounted for 67% of all people living with HIV and for 75% of AIDS death thereby remaining the region most heavily affected by HIV. Almost 90% of the 2million children living with HIV, according to the report, live in sub-Saharan Africa while women account for nearly 60% of HIV infections in sub-Saharan Africa. Young people aged 15–24 account for an estimated 45% of new HIV infections worldwide According to the Population Reference Bureau (2008), young people particularly women are especially vulnerable to HIV/AIDS.

Ever since the discovery of HIV infection in the year 1981, it has continued to wreck a lot of havoc such that it is now seen as a global problem. It has largely erased the gains in health and development made over the years especially in developing countries. In the countries most heavily affected, HIV has reduced life expectancy by more than 20 years, slowed economic growth, and deepened household poverty (UNAIDS 2008). According to UNAIDS (2000), in some countries in Africa, AIDS related morbidity and mortality are causing major reversals in development, childhood mortality, and survival and life expectancy. HIV/AIDS has had a severe impact on the three basic dimensions of human development: a long and healthy life—measured by life expectancy at birth; knowledge—measured by adult literacy and school enrolment; and standard of living measured by per capita gross domestic product. According to the 2008 global AIDS report in the countries most heavily affected, HIV has reduced life expectancy by more than 20 years, slowed economic growth, and deepened household poverty. In the most heavily affected countries, HIV has reduced life expectancy, deepened poverty among vulnerable households and communities, skewed the size of populations, undermined national systems, and weakened institutional structures. (UNAIDS, 2008).

2.4 Epidemiology and impact of HIV/AIDS in Nigeria

Nigeria has the largest HIV/AIDS epidemic in West Africa (UNAIDS 2008). The national HIV prevalence rate among adults aged 15-49 in 2007 was estimated at 3.1 while the number of adults and children living with the virus at the end of 2007 was 2.6 million (UNAIDS 2008). Adults and children who died of AIDS in 2007 were 170,000 while the number of AIDS orphans at the end of 2007 stood at 1.2 million. The UNAIDS 2008 estimates shows a downward trend in both the prevalence and the number of people living with HIV/AIDS in Nigeria. This is the case when compared with the 2005 sentinel survey which put the HIV prevalence at 4.4% and the number of HIV positive people in Nigeria at 2.9 million However, the epidemic cannot be said to have been curtailed based merely on the declining statistics. There are still wide variances within and among states, geo-political zones and sub-populations. As noted by the Scripture Union West Africa (SUWA, 2006), the official HIV Prevalence rate at all levels in Nigeria is grossly

deceptive, masks and obscures stark realities in villages, cities, and even among congregations.

Infact the declining rates as experienced in Nigeria since 2003 has not really resulted in improved life expectancy and quality of life in Nigeria. This could be due to the fact that the rate may not actually reflect the situation in various states, towns and villages in Nigeria as it has been characterized by under-recognition, under-reporting and delayed reporting as noted by the 2005 HIV Sentinel Survey technical report. It should also be noted that poverty, corruption and the poor health system in Nigeria had resulted in low quality of life among the populace even before HIV/AIDS was acknowledged as a serious threat in Nigeria. It is just that the pandemic worsened the already deteriorating condition. The main routes of HIV transmission in Nigeria include heterosexual sex which accounts for about 80% of all infections, blood transfusions which accounts for about 10% of all infections and mother-to-child transmission. It is estimated that more than 90% of children living with HIV acquired the virus during pregnancy, birth or breastfeeding forms of HIV transmission that can be prevented (UNAIDS 2008).

2.5 National Response to HIV/AIDS

AIDS was first reported in Nigeria in 1986 though the first two HIV cases in Nigeria were identified in 1985. It was however in 1987 the Nigerian health sector established the National AIDS Advisory Committee, which was shortly followed by the establishment of the National Expert Advisory Committee on AIDS (NEACA). The Nigerian government initial apathy towards HIV/AIDS has been documented (Kanki and Adeyi 2006). In 1991 the first HIV survey was conducted in Nigeria by the Federal Ministry of Health to assess the Nigerian HIV/AIDS situation. The results showed that around 1.8 percent of the population of Nigeria was infected with HIV. Subsequent surveillance reports revealed that during the 1990s, the HIV prevalence rose from 3.8% in 1993 to 4.5% in 1996. The limited response to the spread of HIV in Nigeria may have resulted in the significant rise in the prevalence rate over the years.

The national response to HIV/AIDS was however expanded with the coming in of a democratic government in Nigeria in 1999. The President's Committee on AIDS and the National Action Committee on AIDS (NACA) were created, and in 2001, the government

set up a three-year HIV/AIDS Emergency Action Plan (HEAP). NACA became an agency through an Act of Parliament in 2007 with a board to facilitate coordination of all HIV/AIDS programmes and activities in Nigeria. Apart from the Federal government's response, States of the federation also established State Action Committee on AIDS (SACA), while the civil society and the private sector are also not left out. The Civil Society's response to HIV and AIDS is coordinated by the Civil Society Network on HIV and AIDS in Nigeria while the private sector response is being coordinated by the Nigeria Business Coalition against AIDS (NIBUCA). Also, in 2008 the wife of the incumbent president inaugurated the National Women Coalition on AIDS which is to address the vulnerability of women, girls and children through increased access to information and education on prevention, treatment, care and support for HIV and other reproductive health services.

2.6 Knowledge of HIV Transmission and Prevention

Correct knowledge of HIV transmission is important to enhance effective action (FMOH, 2006). Similarly Odu and Akanle (2008) opined that having the knowledge of prevention, transmission and other facts would motivate logical safe sex behaviour. Studies have been carried out which revealed different knowledge levels of HIV/AIDS among youths. Studies conducted among youths populations in Indonesia and Mozambique indicated a high misconception about HIV transmission and prevention (Inti, 2002; Barreto, 2004). This seems to agree with the position of Chng, Eke-Huber, Eaddy, and Collins (2005) in a study that was conducted among students in tertiary institutions in Nigeria. Their study indicated that students in tertiary institutions in Nigeria know little about HIV/AIDS. Wodi (2005) in a study conducted among adolescents in Rivers State reported that though almost all the respondents (93%) had heard about HIV/AIDS, it did not appear to improve their knowledge about the disease as one-third of respondents believed that a person can get infected with HIV through mosquito bites. Also, Omoigberale et al (2006) in a study conducted among youths reported that 44% of the youths had no knowledge of HIV/AIDS at all while only 28% had sufficient knowledge. However, a study conducted by Odu and Akanle (2008) revealed that youths have a very high knowledge of basic concepts of HIV/AIDS including transmission. A lot of

sensitization and information dissemination on HIV/AIDS to different populations in the society have been going on over the years and that could be responsible for the very high knowledge which the findings of Odu and Akanle (2008) indicated.

2.7 Overview of HIV testing

Despite the decades of prevention efforts, millions of persons worldwide continue to become infected by the virus every year. This urgent problem of global epidemic control has recently led to the significant changes in HIV testing policies. Provider-initiated approaches to HIV testing have been embraced by the Centers for Disease Control and Prevention and the World Health Organization, such as those that routinely inform persons that they will be tested for HIV unless they explicitly refuse (Rennie and Mupenda, 2007). The global efforts to prevent HIV/AIDS seem to be outpaced by the spread of the epidemic.

Consequently, calls have been made for a more pragmatic approach to containing the disease, with routine and mandatory testing gaining increasing attention (Asante, 2007). Aside from the ethical concerns of these testing policies, some of the different terms used for them appear confusing. The UNAIDS/WHO (2004) policy statement on HIV testing defines four types of testing. These four types are based on two approaches: the client-initiated approach and the provider-initiated approach.

1. Voluntary Counseling and Testing: This is a form of testing in which individuals voluntarily elect to submit to HIV testing to get to know their status. It is a client-initiated HIV testing to learn HIV status through voluntary counseling and testing. It involves individuals actively seeking HIV testing and counselling at a facility that offers these services. Voluntary Counseling and Testing is the gold standard in many countries of the world. VCT is anchored on a human rights approach. According to Anderson (2006), voluntary counseling and testing is the one most firmly grounded in a human rights framework and thus the HIV testing model should be promoted as an integral part of the response to the HIV pandemic.
2. Diagnostic Testing: This is a testing that is indicated when a person shows signs or symptoms that are consistent with HIV-related disease or AIDS to aid clinical diagnosis and management. This is a form of provider-initiated testing.

3. Routine HIV Testing: This is another type of provider-initiated HIV testing. According to WHO/UNAIDS, 2004), a routine offer of HIV testing by health care providers should be made to

a. patients who are being assessed in a sexually transmitted infection clinic or elsewhere for the sexually transmitted infection
b. pregnant women seen in the context of pregnancy- to facilitate an offer of antiretroviral prevention of mother-to-child transmission
c. patients seen in clinical and community-based health service settings where HIV is prevalent and antiretroviral treatment is available.

4. Mandatory HIV Testing: Mandatory testing for HIV and other blood borne viruses of all blood is supported by UNAIDS/WHO when it is destined for transfusion or for manufacture of blood products. Anderson (2006) stated that proponents of mandatory testing assert that it is permissible to abridge the rights of some individuals for the purposes of accomplishing the good for the larger society. However, UNAIDS/WHO does not share this view. UNAIDS/WHO does not support mandatory testing of individuals on public health grounds (UNAIDS/WHO, 2004). A joint report by the two international bodies also restated that the endorsement of provider-initiated HIV testing and counseling by WHO and UNAIDS is not an endorsement of coercive or mandatory HIV testing (WHO/UNAIDS, 2007).

A form of provider-initiated testing but which some schools of thought would want it to be seen as client-initiated is mandatory premarital HIV testing. According to Kidanu, Bradley, Gillespie, Brahmbhatt and Tsui (2007), qualitative studies suggest pre-marital HIV testing ranges from voluntary to compulsory. Rennie and Mupenda (2008) stated that mandatory pre-marital HIV testing is one special form of provider-initiated testing which is being practiced and promoted in various parts of the world and has advocates within international agencies but has received little attention in bio-ethical literature.

2.8 History of mandatory premarital HIV testing

Mandatory premarital HIV testing refers to the requirement of an HIV test as a condition for entering into marriage. According to Rennie and Mupenda (2008), mandatory premarital testing refers to policies that make HIV testing a necessary

condition for civil and/or religious marriage. Mandatory premarital HIV testing has been an issue for close to two decades. Documented studies indicate that premarital HIV testing was first introduced in the Illinois and Louisiana states of the United States of America in the late eighties (Petersen et al, 1990; Mckillip, 1991; Nair, 2007; Turnock and Kelly, 1991). The premarital HIV testing requirement was passed into law by the legislature of the two states. The marriage law was amended to require a physician's statement on HIV testing be submitted to the county clerk before a marriage license could be issued. At the time it was introduced, mandatory testing was opposed by the Centers for Disease Control. The argument by the advocates of the screening was that the knowledge of the test results would prevent transmission by allowing partners to reconsider marriage, adopt safer sex practices, and make informed child-bearing decisions (Harvard AIDS Letter. 1995). Lisko, (1999) reported that Louisiana repealed the law seven months after it became effective; and Illinois repealed its own twenty months after it became effective. Two other states, Missouri and Texas, adopted conditional mandatory premarital HIV statutes. Missouri has retained its statutes but does not actively enforce it while Texas repealed its statutes in 1991.

Despite the apparent failure of mandatory premarital HIV screening at inception, it has continued to be adopted in some other countries. Apart from the fact that many religious bodies in some countries are adopting mandatory pre-marital HIV testing, a report by the Open Society Institute (OSI), (2008) indicated that governments of nations are increasingly adopting mandatory pre-marital HIV testing. OSI (2008), reported that in 1994, seven out of Mexico's 32 states required premarital HIV testing as part of a mandatory screening package while in Southern Chinese province of Yunnan, the regional government made pre-marital HIV testing mandatory in particular high prevalence areas. Tan (2008) stated that in an effort to stop the spread of HIV within marriage, couples wishing to marry in Saudi-Arabia will soon have to be tested for HIV and HCV. Mandatory premarital HIV testing has also been documented in India and Malaysia. In African countries where it is being practiced, it is mainly required by religious organizations. The Open Society Institute has documented the practice of mandatory premarital HIV testing by religious organizations in Nigeria, Democratic Republic of Congo (DRC), Ghana, Burundi and Uganda (OSI, 2008).

2.9 Acceptance of HIV testing

Many approaches to HIV prevention and care require people to know their HIV status. The UNAIDS/WHO/United States Government consultative meeting on HIV testing and counseling in the African region declared that HIV testing and counseling provides a gateway to care, treatment with antiretroviral and support for those in need. According to WHO/UNAIDS (2007), increased access to HIV testing and counselling is essential towards universal access to HIV prevention, treatment, care and support as endorsed by G8 and the UN General Assembly in 2006. Furthermore Ikechebelu, Udigwe, Ikechebelu and Imoh (2006) stated that the identification of infected individuals is an important step in the control of the HIV epidemic. However, the attitude of people towards HIV testing has the tendency to influence its acceptability. The acceptability and attitude towards HIV testing among different populations have been documented by various studies.

A study to determine the level of acceptability of voluntary HIV testing with counseling in a rural setting in Tanzania revealed a moderate level of acceptability of voluntary HIV screening. Kilewo, Kwesigabo, Comoro, Lugalla and Mhalu (1998) therefore suggested that people should be given the choice of knowing their HIV status since it constitutes a potential mechanism for influencing behaviour towards reduction of HIV transmission. Another study on the acceptance of HIV testing and counseling among unmarried youths in Northern Thailand revealed some interesting findings. Though the Thailand government has promoted HIV-TC, only 23% of the young people of marriageable age in Lampang Province had ever been tested and the prevalence of HIV among them was an alarming 9% (Jiraphongsa, Danmoensawat, Greenland, Frerichs, Siraprapasiri, Glick, and Detels, 2002).

In another study by Isezuo and Onayemi, (2004) to find out the attitude of patients towards voluntary HIV testing, majority of the subjects gave informed consent to HIV screening and were tested. The findings of this study is in tandem with a similar study by Ekanem and Gbadegesin, (2004) among Nigerian women attending antenatal clinics at two health facilities in Lagos state which showed that almost all the women (96.1%) were willing to undergo HIV testing. However few would undergo the test if the result would be shared with relatives. The latter part of the findings of this study is dissimilar to that of

Isezuo et al, (2004) that showed that 60.4% of the patients who tested positive showed willingness to disclose their serostatus to family members. It is however silent on the gender of those who show willingness to disclose their status. It is important to note that studies have shown that women suffer the consequences of HIV infection and disclosure of serostatus most (UNAIDS, 2008; Center for Women's Global Leadership, 2006; Mohammed, 2005).

A significant factor that affects acceptance of HIV testing is the issue of perceiving HIV/AIDS as unreal and/or not considering oneself at risk of the infection. According to Habte, Deyessa and Davey (2003), only 55% of couples that underwent civil marriage in Addis-Ababa reported having had pre-marital HIV testing. The main reason given for not having HIV testing was that the interviewees did not feel at risk of acquiring HIV/AIDS. Similarly in a study conducted among polytechnic students in Southeastern Nigeria, Ikechebelu et al (2006) reported that among those who were not willing to go for voluntary counseling and testing, the commonest reason given was that they were certain they were not infected. Underestimation of personal risk for HIV is also a frequent obstacle to uptake of client-initiated HIV testing and counselling (WHO, 2007). Omoigberale, Abiodun, and Famodun, (2004) in a study on the knowledge and attitude of youths aged 15 to 24 years to routine HIV screening revealed that 67.0% of the youths did not believe it exists and were not bothered about it while 58.0% would not agree to routine HIV screening. The reasons given for rejecting routine HIV screening included psychological trauma, infringement on fundamental human rights, and fear of living with positive screening, stigmatization and victimization. However, a study conducted by Illiyasu, Abubakar, Kabir, and Aliyu, (2006) in a rural setting in Northern Nigeria showed that while a significant 34.3% had a poor knowledge of HIV/AIDS, majority were willing to have VCT. Reasons for rejecting VCT included the fear of stigma, marital disharmony, incurable nature of the disease and cost of treatment. This is not surprising, as studies have shown that HIV-related stigma and discrimination remain widespread in Africa. (Glick, 2005) stated that despite having the highest number of HIV cases and AIDS-related deaths, people identified as living with HIV/AIDS still face serious discrimination from and together with their families According to Cayford, (2006) the level of stigmatization against people living with HIV/AIDS is still very much high across Nigeria.

2.10 Acceptance of mandatory premarital HIV testing

Studies have been conducted and different views expressed on mandatory premarital HIV testing. A number of these have focused on the issue of the acceptance of mandatory premarital HIV testing. Furthermore, there have been a lot of arguments for and against mandatory premarital HIV testing. The issues raised in these arguments have to do with the mandatory aspect of the test. Also, the studies and arguments on premarital HIV testing were done within two major contexts- as a requirement by religious bodies and as a requirement by the legislation of a state or country. This study, though focusing on the former, will however review both aspects in this section.

Various studies have documented the acceptance of premarital HIV testing among different populations starting from the states of Illinois and Louisiana in America. According to Petersen et al (1990), in Illinois, 16.0% fewer marriage licenses were issued in 1988 than the average in 1986 and 1987, the two years before mandatory pre-marital screening was instituted. Rather than take the HIV test and get married in Illinois or not get married at all, couples crossed the state line and were married in states bordering Illinois (Mckillip, 1991). Turnock and Kelly (1989) also reported the increase in the number of marriage licenses issued in states surrounding Illinois. A similar situation also occurred in Louisiana. After premarital screening began in Louisiana and Illinois, marriage licenses dropped by 9 percent and 16 percent in Louisiana and Illinois respectively (Frerichs, 1996). Gostin (1987) quoting Turnock and Kelly (1989) said an alternative explanation for the changes in marriage patterns is fear of an AIDS diagnosis. This experience may have informed the position of the Center for the Right to Health (2003) that mandatory premarital testing, in the face of intense stigma and discrimination would only serve to drive vulnerable people underground or force them to avoid religious wedding completely. The Open Society Institute (2008) in a publication indicated that Louisiana repealed its statute seven months after enacting it while Illinois also repealed the statute mandating premarital HIV testing after twenty months.

A randomized study on the acceptability of HIV/AIDS counseling and testing among premarital couples in China showed that acceptance of HIV testing was disappointingly low (Wu, Rou, Xu, Lou, and Detels 2005). This obviously reflects the non-acceptance of mandatory premarital HIV testing. Some other studies and schools of

thought have also denounced mandatory premarital HIV testing. In the opinion of Kamarulzaman (2008), premarital testing is a one-off test while the risk of acquiring HIV is potentially lifelong. Also in Malaysia where premarital HIV testing is already mandatory for Muslims in some states, Wen (2009) said that it did not fail to cause uproar particularly from NGOs who had worked very hard in trying to eradicate the stigma associated with the disease and promoting voluntary counseling and testing.

Another issue which has attracted concerns is that testing negative tends to bring a feeling of not being at risk of HIV anymore. Some schools of thought are of the view that a negative test result will lure the person into a false sense of security (Nair, 2007; Herald News Bureau, 2007; YWCA of Malaysia, 2008; MacDougall, 2008). This false sense of security according to Nair (2007) would encourage a casual attitude and lead to indulgence in high-risk behavior without proper precautions. One of the high risk behaviors responsible for the continuous spread of the infection is heterosexual sex, especially unprotected sex. It is believed by proponents of mandatory premarital HIV testing that it would reduce heterosexual transmission and subsequently, mother-to-child transmission.

However, the belief that mandatory premarital HIV testing would reduce the heterosexual and perinatal transmission of HIV has been punctured by opponents of the practice. Wu et al, (2005) were of the view that mandatory testing will force couples to seek other strategies for setting up long-term relationships, as was the experience when testing was made mandatory in the state of Illinois. A 1991 study of mandatory premarital HIV testing in the Mexican province of Coahuila concluded that mandatory premarital testing was useless in the control of the spread of HIV, as refusal of a license to marry does not prevent sexual activity among consenting adults (Rio, Trevino, Mellado, Quintanilla and Muniz, 1994). This finding is in line with the position of Gershaw (1991). The data from the study conducted in Illinois by Petersen et al 1990 indicated that 75% of children with perinatally acquired AIDS in New York City were born to unmarried women. They therefore were of the opinion that premarital HIV screening could not be considered a substitute for other public health strategies to reduce perinatal and heterosexual HIV transmission.

Furthermore, there is the issue of the limited population that mandatory premarital HIV testing would target. Malhotra, Malhotra and Sharma (2008) while opposing the intent of state and central governments of India to introduce mandatory premarital HIV testing said among other reasons that such a policy would target a limited population and would have limited impact in population groups at a high risk for HIV infection. It is believed that intending marriage couples are a group not considered at high risk for HIV infection. This raises the question of the cost-effectiveness of mandatory premarital HIV testing. Some studies have documented that mandatory premarital HIV testing is not cost effective. The study conducted by Rio et al (1994) in Coahuila, Mexico, revealed that only one new HIV infected person was diagnosed out of 9,014 premarital HIV tests that was done. They therefore opined that premarital HIV testing is not only violatory of human rights but an expensive public health measure useless in the control of the spread of HIV. This was the same position in the research conducted in Illinois which showed a significant increase in the number of marriage licenses issued to Illinois residents in states surrounding Illinois while that of Illinois decreased. Turnock and Kelly (1991) therefore recommended that mandatory premarital testing is not a cost-effective method for the control of HIV infection. Their recommendation is also in line with the position of Petersen et al (1990) that the high cost of mandatory premarital screening relative to other public health programs do not appear to justify its institution. Umeora et al (2005) do not however share the same view as they recommended that screening intending couples-a population not considered at high risk for HIV infection could play an important role in HIV detection in the general population.

The implementation of a policy or program is very vital to its acceptance and success. In the opinion of Kamarulzaman (2008), it is highly unlikely that those charged with the implementation of the policy of mandatory premarital HIV testing including religious leaders and even health workers have been adequately trained and prepared for the task. A key area in HIV testing which also applies to mandatory premarital HIV testing and which has received attention especially by the opponents of the policy of mandatory premarital HIV testing is counselling. Counseling both before and after (pre-test and post-test) testing is very vital. According to OSI (2008), counselling services are often lacking in premarital testing conditions. As a result, there have been calls for

mandatory counseling and voluntary screening. Fears have however been expressed concerning the quality of counselling that would be offered in mandatory premarital HIV testing. Commenting on the situation of HIV counseling in India, Vaidya-Yadav (2006) stated that already, the quality of counseling had become a cause of concern in India and that making testing mandatory would deteriorate it further. This assertion is in line with the position of Dr Christopher Lee, the president of HIV Medicine as quoted by Wen (2009) that mandatory testing is often associated with poor or inadequate counselling and education. In the Public Health Fact Sheet by the Open Society Institute (2008), it was stated that in Burundi, priests in Catholic churches which require premarital HIV testing are not trained counselors while in Cambodia, a study conducted in 2005 found that post-test counselling generally lasted five minutes and that counselors do not address all risk behaviors. According to (SUWA) (2006), mandatory premarital HIV testing without pre and post counselling is counter productive. Luginaah, Yiridoe, and Taabazuing (2005) in a study conducted among Christian religious leaders in Ghana stated that church-based marriage counsellors reported being ill-equipped to counsel members diagnosed as HIV positive and therefore requested training and support from the government.

Inspite of these concerns however, there are increasing calls for mandatory premarital HIV testing. Muula and Mfutso-Bengo (2004) reported that premarital HIV testing has been suggested as one of the interventions to be pursued in order to curb the HIV pandemic in Malawi. They however stated that, premarital HIV testing for couples and mandatory testing before marriage has not been accepted as yet by unmarried and married persons. They therefore advocated for the need to explore legal provisions to make such testing mandatory. Again, the US Center for Disease Control and Prevention reports that clergymen in Malawi are advocating mandatory premarital HIV testing. The spokesman of the clerics called on government to make HIV testing and premarital counseling mandatory, noting that the Christian Bible and the Muslim Quran preach abstinence and monogamy as the ways of preventing the spread of the disease.

Other views in support of premarital HIV testing have been documented. Faye (2003) disclosed that women's groups in Senegal were urging the parliament to pass the mandatory premarital testing immediately and that refusal to undergo premarital HIV testing be made a criminal offence. Similarly, the benefits and acceptance of mandatory

premarital HIV screening were also highlighted in a study on the performance of premarital HIV testing in Johor, Malaysia. Khebir, Adam, Daud, and Shahrom (2003) disclosed that the programme had received wide acceptance and partly contributed to the public awareness against the HIV and provides another option in the early detection of the disease. Nganga, Marum, Odoyo, Hawken, Kaman, and De Cock (2004) were also of the view that, despite social challenges, premarital testing of couples offers opportunity for preventing heterosexual and mother-to-child transmission of HIV, as well as of orphaning of children. They were however silent on the nature they would want it to take.

2.11 Mandatory pre-marital HIV testing in Africa

Mandatory pre-marital HIV testing has also been in practice in some countries in the Africa continent. Some reports and researches have documented the adoption of mandatory pre-marital HIV testing in some African countries. A study by Nganga et al (2004) in Kenya revealed that of the 59,487 clients that went for HIV testing in 3 VCT sites in the country over a period of two and a half years, 8,812 (15.0%) gave premarital testing as a major reason for coming for the test. Their findings further showed that the prevalence of HIV infection in all the females that came for premarital HIV testing was 14.0% compared with 8.0% in the premarital males while Of 1,096 couples tested pre-maritally, 15% were serologically discordant, one partner being HIV-infected and the other negative. Though the study did not indicate whether the test was mandated for the pre-marital couples, the fact that they came to the VCT sites somehow indicated voluntariness. However, it should be noted that the fact that pre-marital HIV testing has become a social expectation especially in places where it was once mandatory has been documented (OSI, 2008; Luginaah et al, 2005).

A similar study in Uganda revealed that there was a considerable public interest in pre-marital HIV testing in Uganda, and this interest was reflected in the increasing numbers of persons who requested HIV counselling and testing before marriage and among couples forming new relationships. The testing which took place in the AIDS Information Centre (AIC) in Uganda was voluntary and anonymous. Baryarama, Kalule, Gumisiriza, Alwano-Edyegu, Marum and Moore (1996) stated that there was an increase in the percentage of clients who came for the test from 9.0% in 1992 to 23.0% in 1995.

However, by 2006, pre-marital HIV testing had become a requirement for getting married in the church. According to OSI (2008), In Uganda, by 2006, church leaders were requiring an HIV test of couples wishing to marry. Similarly, a report by the BBC News (2006) stated that in March 2006, the Roman Catholic Church in Burundi instructed its priests only to conduct wedding ceremonies if the couples first present an HIV test. This has also been documented by the Open Society Institute. The church however added that those unwilling to be tested may still be married through a civil ceremony. In Goma, Republic of Congo, mandatory premarital HIV testing was initiated about 10 years ago by some local churches, particularly the Communauté des Eglises Baptistes au Centre de l'Afrique (CBCA) and has subsequently been adopted by the mayor of Goma for civil marriages since 2004 (Rennie and Mupenda 2008). In many of these African countries where mandatory pre-marital HIV testing is in practice, it is usually started by religious organizations especially Christian religious organization while the government either adopts it later as in the case of Goma, discourages it as it was in the case of Ghana or maintains an indifferent posture as in the case of Nigeria.

2.12 Mandatory premarital HIV testing in Nigeria

Controversies on HIV testing in Nigeria have been in the front burner in recent times. The most recent one being the mandatory HIV and pregnancy test for graduating students of a university established by a religious body. Another recent one as reported by one of the dailies (The Punch, July 12 2007) was the order by the Police command that all its personnel from 49 years down should go for compulsory HIV test. Also, pre-employment HIV testing has generated a lot of controversies in Nigeria. None of this has however attracted as much attention, focus and studies as premarital HIV testing.

The calls for premarital HIV testing especially by religious leaders in Nigeria have continued to increase. It is interesting to note that premarital HIV testing is not a recent happening in Nigeria. As far back as 1999, there had been a study by Ubuane, et al which was presented at the International Conference on AIDS in year 2000.The studies on premarital HIV testing in Nigeria are not much compared to other public health issues. A significant inference from these studies is that premarital HIV testing is a modern-day strategy by many religious bodies in Nigeria to combat the spread of HIV/AIDS among

their members. UNAIDS (2001) reports that in high prevalence countries, parents of young people and religious organizations are promoting premarital HIV testing.

Marriage in Nigeria can be religious, customary or civil. However, religious marriages, especially Christian and Muslim marriages are the commonest in Nigeria. Oku-Egbas (2006) stated that young people especially women, dream and yearn for the day they will walk the aisle to the altar on the arms of the man of their dreams, and with the hope of a happy, serene and secure life ever after. However, the marriage bed can also become a deathbed, with more people, especially women, getting infected with HIV within the context of marriage (Oku-Egbas, 2006). In order therefore to prevent this, many religious organizations in Nigeria as a departure from the initial denial of HIV/AIDS have instituted strategies, of which mandatory premarital HIV testing is one. According to PlusNews (2008), getting married in Nigeria often requires more than just the bride and the groom turning up at the altar and having witnesses and wedding rings present; many Christian churches also require an HIV test. AIDS is no respecter of national boundaries, church membership, gender, marital status, education, income or position in life (General Conference of Seventh-day Adventists, 2007). According to the Global Network for Islamic Justice, (2007) the issue of premarital HIV testing should not be taken for granted because the very essence of marriage as a religious obligation is to regenerate and bring happiness to the family, not to exterminate the family and cause trauma.

Despite its apparent deficiency, mandatory premarital HIV testing is gaining acceptance both among religious bodies and other groups in Nigeria. This is reflected in the fact that the proportion of people who desired HIV test in order to satisfy marriage requirements increased significantly from 2.4% in the 2004 NARHS to 3.0% in the 2005 NARHS. In a study conducted among young women in Ethiopia by Kidanu et al (2007) 89% of the young women stated their pre-marital test was required while almost 50% said it was a law/community custom. In a study conducted among health workers in North-central Nigeria, Musa (2005) reported that majority of them agreed that premarital HIV testing was necessary while majority were also in support of its enforcement for all couples. Similarly, Ikechebelu (2006) in a study conducted in Southeastern Nigeria among polytechnic students reported that premarital testing was the second commonest reason for taking a HIV test.

Various other studies have highlighted HIV prevalence among intending couples referred from religious organizations for premarital HIV testing. Uneke, Alo, and Ogbu, (2007) reported that 7.8% of the 319 individuals who were referred for premarital HIV testing by faith-based organizations were confirmed HIV positive. In another study by Akani, Erhabor, and Babatunde (2005), the HIV prevalence among prospective couples referred from faith-based organizations in Port Harcourt was an alarming 20.8%. Similarly, a study was conducted by Odunukwe and Oruche (2005) to determine the prevalence of HIV/AIDS among intending marriage couples between 1998 and 2004. The results showed that the prevalence came down from 16.7% in 1998 to 10.4% in 1999. It then rose again to 15.1% in 2000 only to drop consecutively in 2001 (10.9%) and 2002 (9.0%) before rising again to 12.7% in 2003 and going down again to 9.6% in 2004.

These results show a high prevalence of HIV infection among intending couples contrary to the findings of studies that were done initially in some countries. In fact, one of the issues against mandatory premarital HIV is based on the findings of the studies conducted on the Illinois and Louisiana experimentation with mandatory premarital HIV testing. Part of the argument was that very few HIV positive cases were discovered at enormous cost in the two cities and also in Coahuila, Mexico. The prevalence among intending marriage couples from the studies in Nigeria is reasonably high. Though the premarital testing in the study by Odunukwe and Oruche could be said to be voluntary as the intending couples came for the test after advocacy visits to churches by the researchers, the same cannot possibly be said for the study by Uneke et al and Akanni et al. Yet the HIV prevalence was also high among intending couples in the two studies. This relatively high prevalence may have informed the proposition of Umeora et al (2005) that screening apparently healthy individuals such as couples intending to marry, and who are otherwise not members of a group considered at risk for HIV infection, can serve an important role in HIV detection in the general population.

2.13 National Policy on HIV/AIDS, National Guidelines on VCT, and mandatory premarital HIV testing

The overall goal of the National HIV/AIDS Policy as stated in the policy document is to control the spread of HIV in Nigeria, to provide equitable care and support

for those infected by HIV and to mitigate its impact to the point where it is no longer of public health, social and economic concern, such that all Nigerians will be able to achieve socially and economically productive lives free of the disease and its effects" (National Policy on HIV/AIDS, 2003). The section of the Federal government's policy on HIV/AIDS (2003) adopts only voluntary confidential counseling and testing (VCCT). Part of the provisions in the VCCT section of the policy is stated below:

> Nigeria, recognizing the usefulness of voluntary confidential counselling and testing services, commits itself to the establishment and support of a network of VCCT services that will provide the citizenry with affordable and accessible quality VCCT services:
>
> • The Government shall promote the adoption of socially acceptable and ethically correct programmes that facilitate the early diagnosis of HIV/AIDS in all public and private health institutions.
>
> • Voluntary HIV testing shall be universally available and accessible.
>
> • Appropriate counselling and the maintenance of confidentiality shall be assured during the provision of voluntary HIV testing.
>
> • All screening facilities shall apply the prescribed national protocol for HIV testing provided by the Federal Ministry of Health;
>
> • Voluntary counselling shall be routinely offered to all couples applying for marriage licenses and women attending ante-natal clinics; in neither case will it be mandatory.
>
> • Voluntary confidential testing with pre and post-test counselling shall be an integral part of primary health care services. Counselling shall include appropriate information on safer sexual practices, family planning counselling and referrals to family planning services when necessary.

In the National Guidelines for HIV Counselling and Testing, it is stated that pre-marital HIV Counselling and Testing services should be encouraged in all sectors of society and must observe the 3Cs principles of counselling, confidentiality and consent (informed and voluntary). It could be right to say that many of these provisions have not been implemented and if they have, have not been implemented to the letter. There could

be the argument that mandatory premarital HIV testing started before the development of the policy and that the institution of the National Policy was in response to stem the tide of HIV/AIDS in Nigeria and to develop an internationally acceptable code of testing. The fact that mandatory premarital HIV testing is still in practice by religious organizations in Nigeria is a pointer to the fact that the provisions of the VCCT component have not been faithfully implemented. According to (Ogundipe, 2007) the National Policy on HIV/AIDS prohibits mandatory HIV screening under any guise. There is also no federal or state law in Nigeria making premarital HIV testing mandatory. However, it is needful to state here that mandatory premarital HIV testing in Nigeria is not an issue that can just be wished away especially since it is something that borders on religion Nigeria is a country where much value is placed on religion and religious leaders. According to the Center for the Right to Health (2003), many Nigerians have a strong connection to their religious community. It therefore stated that testing should be voluntary and their (intending couples) decision respected. This is similar with the position of Uneke et al (2007) and Akani et al (2005) that voluntary counseling and confidential HIV testing and especially pre- and post-test counselling as the basis of premarital HIV testing are more desirable.

2.14 The Christian community, HIV/AIDS, and mandatory premarital HIV testing

The issue of HIV/AIDS infection apart from assuming a gender dimension has also assumed a religious dimension. According to Mack (2006) HIV rates among Christian populations have remained significantly higher than among Muslim populations. Using Nigeria as an example, he stated that the highest prevalence rates are found in Christian areas of the country, such as Benue where 10% of the population is HIV positive. According to SUWA (2006), the incidence and prevalence of HIV and AIDS particularly among Christian communities in Sub Saharan Africa and Nigeria, is a reflection of spiritual decadence; and the failure of the Church to teach, preach and uphold Christian values and ethos of sexual chastity by its youths, and mutual fidelity by married couples Indeed, the church in Nigeria is facing a Herculean task in confronting the realities of the HIV epidemic. Some denominations continue to deny the reality of HIV and AIDS, and as a consequence have not been fully involved in HIV and AIDS intervention programmes (SUWA, 2006).

From the previous denial and apathy by religious leaders including those of the Christian fold, many strategies to combat the scourge such as enlightenment programmes, care and support of people living with HIV/AIDS have been deployed by Christian bodies just as they continue to advocate against premarital sex and to demand for premarital HIV testing from couples who intend to wed in the church. According to PlusNews (2008), in an era where sex is the norm, several Orthodox and Pentecostal churches are promoting mandatory testing as a clear-eyed thinking. The Public Health Fact Sheet by the Open Society Institute stated that there had been reports of mandatory premarital testing among Catholic parishioners and across all Anglican dioceses since 2000. However, this testing leaves much to be desired as it has been identified with some deficiencies as according to Musa et al (2004), in Nigeria, many churches know the importance of premarital HIV testing and make it mandatory for prospective couples as wedding criterion without proper systems for effective pre- and post-test counselling. SUWA (2006) observed that there are no institutionalized methods of HIV counseling and testing in most Churches, hence the adoption of fire brigade measures, such as mandatory premarital testing. The non-institution of effective pre and post test counseling by churches could be as a result of not having had any HIV positive case. It could also be due to the misconception that those who are members of the church or who readily accept to go for testing are likely to be the ones of good behaviour and HIV negative. Duginaah et al (2005) however opined that this has not always been the case, as some churches have had cases of intending couples testing HIV positive. Studies that have been conducted on HIV prevalence in the eastern part of Nigeria showed a prevalence rate of between 2% to 24% among intending couples referred for premarital HIV screening by churches.

Furthermore, there is still the belief that having HIV infection is a death sentence. This misconception is also prevalent among Christians including church leaders. Findings from the study of HIV/AIDS and human rights in Nigeria showed that some Christian religious leaders believe that there is no need to continue marriage with somebody who already has a death sentence (Center for the Right to Health, 2003). The death sentence in this case is HIV infection. This informs the decision of some churches to decline the conduct of marriage for intending couples in a situation where either of the couple tests HIV positive. Many churches have high levels of stigma and intolerance perhaps because

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there is a direct association between HIV and sin as according to Ogundipe (2006), the notion that people living with HIV and AIDS must have become infected through acts of promiscuity is widespread within the church. Christians appear to emphasize the control the individual has in choices and thus, are more likely to believe that those who have the disease are 'blameable' and that HIV/AIDS is the result of some moral blemish. (Ankomah, Anyanti, Omoregie, Ali, and Musa-Ibrahim, 2003). The implication of this is the promotion of stigma and discrimination against people living with HIV/AIDS. This also has the ability of making prospective couples avoid religious weddings, especially church weddings completely in churches where premarital HIV testing is required. This is even affirmed by the Center for the Right to Health while arguing that mandatory premarital HIV testing would force people to avoid religious wedding completely. It is ironic that while it is religious bodies especially the church that are promoting mandatory premarital HIV testing in Nigeria; it is actually Christian bodies that are opposing it in India. Nair (2007) and Herald News Bureau (2007) stated that the church in the state of Goa, India, opposed the decision of the state to institute mandatory premarital HIV testing.

The situation is not all negative as some churches have set up effective programmes to combat HIV/AIDS. Some have also instituted voluntary counseling and premarital HIV testing. Included in the HIV/AIDS policy of some is that VCT should be completed before the wedding date is set and before announcements are disseminated. Some also have it in their policy that the clergy should not refuse to wed couple in the church because of their HIV/AIDS status.

However, a study conducted in Ghana revealed that what churches refer to, as voluntary HIV testing and counselling may not be truly voluntary. The study disclosed that intending couples in these churches feel compelled to go for the test in order to please the church (Luginaah et al 2005). A similar situation was reported in Zanzibar. According to OSI (2008), religious leaders started recommending premarital HIV testing in 2002 and 2003 and though it is not mandatory, effective religious lobbying in the community has rendered premarital HIV testing a social expectation. The same situation may apply to churches in Nigeria that require premarital HIV testing but term it voluntary. According to Kidanu, Bradley, Gillespie and Brahmbhatt (2007), two qualitative studies from Nigeria and Ghana suggest pre-marital HIV testing ranges from voluntary to strongly encouraged,

or even compulsory. In addition, Zou, Yamanaka, John, Watt, Ostermann and Thielman (2009) reported that, on a regulatory level, some churches require or heavily encourage couples to be tested for HIV before getting married. Ladan (2006) opined that mandatory pre-marital testing and/or the requirement of AIDS-free certificate as a precondition for the grant of marriage licenses by the church infringes the right of people living with HIV/AIDS.

2.15 The Muslim community, HIV/AIDS and mandatory premarital HIV testing

Many Muslims view the AIDS epidemic through the 'prism of sin, and as a consequence of sinful behaviour such as drug use or promiscuity (Mohammed, 2005). A study on stigma and discrimination against people living with HIV/AIDS revealed an interesting finding about Muslims in Nigeria. Findings from the study showed that Muslims in Nigeria are more likely to accept HIV infections as predestined and by implications less likely to stigmatize (Ankomah et al, 2003). It can be deduced from these findings that the likelihood of not doing anything about the spread of the disease could exist among Muslims because of the notion of predestination. According to Oshodi (2006) the Muslims as a religious group have displayed too much indifference and silence.

Religion does play a large role in shaping the HIV/AIDS crisis in Nigeria (Mack, 2006). Islam stipulates a system of life which is based on all good and is free from all evil, safeguarding the individual, family and society from social and moral ills. There have been arguments on whether the Islamic religion practices actually helps in the prevention of HIV infection or aids it. According to Gray (2004) several of the religiously motivated behaviors practiced by Muslims are favorable for HIV prevention and have led to lower HIV prevalence rates among Muslims. Opposing views have however been expressed about this. According to Kelly and Eberstadt (2005), Islamic culture and Muslim beliefs are manifestly not enough to inoculate human population against the spread of HIV. Furthermore, the Islamic doctrine about marriage makes Muslims particularly in the marriage institution vulnerable to HIV infections and other reproductive health problems. The Muslim polygamous culture is surely one of the easiest way through which HIV virus can be transmitted innocently among Muslims in the predominating Muslim states and the whole muslin Ummah in general (Mohammed, 2007). It therefore among other

suggestions advocated for mandatory premarital HIV screening among all intending couples in order to safeguard the marriage institution. Mohammed (2005) also, opined that it was necessary for prospective couples to undergo HIV/AIDS testing before marriage.

This adds to the increasing calls for premarital HIV testing among intending couples in the Muslim community. The Thisday newspaper, November 14, 2006 edition reported that the Islamic Network for Development advised youths to know their HIV status and that of their spouse ahead of marriage. An Islamic cleric from Kano State Sharia Commission has also urged premarital HIV counseling and testing to prevent the spread of HIV in the Muslim community. As far back as 1997, resolution that mandatory premarital HIV screening clearance be introduced, which would be confidential to the parties concerned, were presented at the 55th supreme council session in Kampala. Uganda. It was proposed that the resolution be circulated to all the Muslin Ummah in Africa in order to give sufficient time to the Ummah to discuss them to facilitate adoption (Global Network for Islamic Justice, 2007).

2.16 Mandatory premarital HIV testing and human rights

The human rights aspect of premarital HIV testing perhaps has attracted a lot of controversies. Human rights activists have argued that mandatory premarital HIV testing is a violation of human rights. Human Rights Watch (2006) stated that as HIV tests have become cheaper and more widely available, an increasing number of countries are supporting stand-alone HIV testing programmes that are coercive and discriminatory, fail to ensure confidentiality, and do not provide access to prevention information and treatment. It is important to examine the concept of human rights at this juncture.

Human rights are inherent in man; they arise from the very nature of man as a social animal. They have their origin in the fact of the human condition, and because of this origin, they are fundamental and inalienable. These rights are universal, indivisible, that is the improvement of one right facilitates advancement of the others. Likewise, the deprivation of one right adversely affects the others. They are independent and interrelated. These rights have been recognized by various conventions, charters etc such as the United Nations Declaration of Human Rights (1948), the African Charter on Human Rights (1981), the International Covenant on Civil and Political Rights (1976). Human

rights are applicable in every facet of life including the aspect HIV/AIDS and testing. International treaties, which provide the framework on HIV/AIDS, human rights and social issues, include Universal Declaration of Human Rights (1948), the International Covenant on Civil and Political Rights (1976) and the International Covenant on Economic, Social and Cultural Rights (1976). For instance, Article 16 of the Universal Declaration of Human Rights stated the following rights which concern marriage and the family.

- Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.
- Marriage shall be entered into only with the free and full consent of the intending spouses.
- The family is the natural and fundamental group unit of society and is entitled to protection by society and the State

Specifically, the UNAIDS and United Nations Commission on Human Rights (2006) in collaboration with other international agencies developed guidelines on HIV/AIDS and human rights. The guidelines emphasized that the promotion and protection of human rights is an essential component in preventing the transmission of HIV and reducing the impact of HIV/AIDS. Some of the areas which the guideline highlighted include the following;

- The protection of human rights is essential to safeguard human dignity in the context of HIV and to ensure an effective, rights-based response to HIV and AIDS. An effective response requires the implementation of all human rights, civil and political, economic, social and cultural, and fundamental freedoms of all people, in accordance with existing international human rights standards;
- Public health interests do not conflict with human rights. On the contrary, it has been recognized that when human rights are protected, fewer people become infected and those living with HIV and their families can better cope with HIV and AIDS;

- A rights-based, effective response to the HIV epidemic involves establishing appropriate governmental institutional responsibilities, implementing law reform and support services and promoting a supportive environment for groups vulnerable to HIV and for those living with HIV;

According to the Center for the Right to Health (2003), the promotion and protection of human rights reduces vulnerability to HIV infection by addressing its root causes, lessens the adverse impact on those infected and affected by HIV, and empowers individuals and communities to respond to the pandemic. Therefore, UNAIDS (2006) stated that it is the responsibility of all States to identify how they can best meet their human rights obligations and protect public health within their specific political, cultural and religious contexts. However, pre-marital HIV testing as it is being practiced by religious organizations in Nigeria raises human rights concerns due to the mandatory nature. United Nations guidelines emphasize the importance of avoiding HIV prevention and care programmes that contain coercive or punitive measures as such programmes are likely to reduce the participation of people living with HIV, and increase the alienation of those at risk (UNAIDS, 2000). The International Guidelines, referring to the Universal Declaration, argued that mandatory premarital testing for HIV violates the rights of individuals (UNAIDS, 1998).

2.17 Mandatory pre-marital HIV testing and reproductive rights

Reproductive rights are a series of legal rights and freedoms relating to reproduction and reproductive health. According to the UNFPA (2009), Reproductive rights were clarified and endorsed internationally in the Cairo Consensus that emerged from the 1994 International Conference on Population and Development. This constellation of rights, embracing fundamental human rights established by earlier treaties, was reaffirmed at the Beijing Conference and various international and regional agreements since, as well as in many national laws. They include the right to decide the number, timing and spacing of children, the right to voluntarily marry and establish a family, and the right to the highest attainable standard of health, among others. The National Reproductive Health Policy and Strategy also identified the reproductive health rights. One of the reproductive health rights which is crucial especially regarding the issue of mandatory pre-marital HIV testing

is the right of men and women of marriageable age to marry and found a family based on full and free consent. This implies that even if the intending couple have to go for pre-marital HIV testing based on the policy of their religion or religious organization, the decision of the couple should be respected should they decide to go ahead with the wedding even if one of them tests positive. By respecting the decision of the couple, this aspect of their reproductive health rights would have been upheld.

Another of the reproductive health rights is the right to privacy. The International Covenant on Civil and Political Rights states that no one shall be subjected to arbitrary or unlawful interference with his privacy. This right to privacy includes an obligation to seek informed consent for HIV testing, and an obligation to maintain the privacy and confidentiality of all HIV related information. The UDHR, the Nigerian Constitution, and the African Charter on Human and People's Rights also provide for this right. A school of thought however believes that an individual's right to privacy must be respected but not at the cost of a human life. This belief was also reflected in a study among religious organizations in Ghana where the leaders stated that their mandatory premarital HIV testing policy is their genuine way of protecting those who are HIV negative from becoming infected. However, it should be noted that sexual intercourse prior to marriage, even among intending couples is quite common in many countries. Frerichs (1997) therefore opined that when potential spouses are tested before marriage, they might therefore be in the window period. The right to marry and found a family is one of the fundamental human rights while the Nigerian constitution also recognizes the citizens' right to privacy and family life. Opponents of mandatory pre-marital HIV testing believe that the practice violates these rights (Ladan, 2006). According to Gruskin, Roseman, and Ferguson (2007), requiring individuals to submit to a pre-marital HIV test before being allowed to marry raises many of the human rights concerns relevant to other forms of mandatory testing: voluntariness, privacy and confidentiality as well as appropriate counselling, referral and access to treatment

2.18 Mandatory Premarital HIV testing and confidentiality

Confidentiality relates to the fact that every individual should be entitled to privacy with regards to his/her most personal secrets (Ajuwon, 2007). UNAIDS and WHO (2000) emphasized that an individual will use VCT service when he/she is assured that the health

care worker will keep test result confidential. Again, the right to privacy is one of the reproductive rights stated in the National Reproductive Health Policy and Strategy. It implies that all sexual and reproductive health care services should be confidential. The aspect of confidentiality has been a sore point in the issue of mandatory premarital HIV testing. A study on the attitude towards premarital HIV testing in Malawi revealed that perceived lack of confidentiality and fear of stigmatization were the factors that negatively influenced willingness to accept HIV counseling and testing. Misiri and Muula (2005) reported that considering that HIV testing has been suggested as a prerequisite for marriage, if marriage is cancelled due to HIV infection of one of the partners, secrecy may no longer be possible to maintain. The study also revealed those that preferred maintenance of confidentiality if one is HIV positive and urban dwellers were more likely to accept HIV testing prior to marriage.

According to Kinemo (1999) the reality is when a couple seeks religious blessings for the marriage, at that stage is already common knowledge to the community of those intending to get married. He stated further that, if it then happens that the church or mosque refuses to bless the marriage after the HIV test results, then the confidentiality and privacy of the couple would have been breached. Khalib (2005) writes that in Malaysia, the women must obtain the consent of the father in a Muslim wedding. The father will in turn, want to know the test results of the HIV test. Consequently, the results will be known among family members and despite counselling for the couple, a breach in confidentiality (which will happen) will also definitely result in discrimination and ostracization of the HIV positive person. Research by a body known as Human Rights Watch in the Dominican Republic, Romania and Zimbabwe found that HIV testing practices that were not voluntary, were not linked to counseling and care and failed to protect confidentiality effectively discouraged people from seeking care and lead to increased stigma and abuse. The study by Wu et al (2005) showed that though health workers informed participants that their test results would remain private unless otherwise specified, confidentiality was neither defined nor stressed. This may have been responsible for the disappointingly low acceptance rate of premarital HIV testing recorded in the study. Kinemo (1999) therefore opined that premarital HIV testing should be discouraged and that religious bodies that

demand certificate of HIV/AIDS should be prohibited because it violates the right to privacy and confidentiality.

Without the assurance of confidentiality, young people planning to wed in church may hesitate to go for testing and counseling, fearful of the repercussions that unauthorized disclosure of their status to family members and the public will have on their lives. On the other hand, the failure to disclose HIV positive status , especially to a traditional legal wife, prospective spouse any previous sexual partner will make individuals vulnerable to infecting others and defeat the HIV prevention efforts of religious organizations. In the opinion of Luginaah et al (2005), it will be vital to improve protection of confidentiality and at the same time, to take all possible steps to reduce stigmatization and discrimination against those who test HIV positive. Voluntary counselling and testing programmes at the premarital examination would be particularly desirable, they must be carried out against a background of awareness-raising, de-stigmatization of the disease, and the expectation of benefit of testing (Hesketh, Huang, Wang, Xing, Cubitt and Tomkins, 2003). The recommendation of the International Guidelines on HIV/AIDS and Human Rights stated that HIV-related information on individuals should be included within definitions of personal medical data subject to protection and should prohibit the unauthorized use and/or publications of HIV-related information on individuals.

2.19 Gender issues in mandatory premarital HIV testing

Many studies have shown the gender differentials in the HIV/AIDS pandemic. Reports indicate that women are more affected by the disease than men. Some studies on premarital HIV testing also support this assertion (Akani, et al, 2005; Umeora, et al, 2005). However, other studies in this area dispute this. Studies by Uneke et al (2007) and Jeremiah, Okon, and Jeremiah (2007) showed HIV prevalence was higher among men who did premarital HIV testing. Particularly significant in the findings of Jeremiah et al was that the 2.0% HIV prevalence among premarital couples in the study they conducted was only among males. The findings of this study is in line with a study by Peterson and White, in which HIV prevalence among female and male premarital couples in the United

States of America was found to be 0.0% to 0.4% and 0.0% to 1.1% respectively (Jeremiah et al, 2007).

Globally however, women are more affected by the pandemic. This gender issue has also cropped up in the premarital HIV testing controversy. According to Gruskin, Roseman, and Ferguson (2007), requirements for pre-marital HIV affect both women and men. Some reports have however documented the fact that the pressure arising from premarital HIV testing is more on women. Faye (2003) reports that women's groups in Senegal are urging the health officials to make premarital HIV testing mandatory in order to protect young women against AIDS. Many of these women rights advocates believe that prenuptial testing will protect them against them against HIV infection. Another school of thought perceives it as a form of empowerment for women. The decision of the government of Goa in India to institute mandatory premarital HIV testing for premarital couples seems to toe this line. According to Vaidaya-Yadav (2006), the government of Goa said it wants to make testing mandatory in order to empower women, because it may not be otherwise possible for them to demand a test from their prospective husbands.

The findings from a pilot study involving couples in Thailand that responded to the campaign for voluntary HIV testing before marriage seems to support this. The findings revealed that 48% of husbands and 60% of wives among the 120 couples interviewed chose HIV testing while 30% of wives were able to convince their husbands to be tested as well. However there are contrary opinions to the claim of mandatory premarital HIV testing being a strategy for empowering women. According to Frerichs (1997), given current gender roles and norms, it will frequently be women who suffer the consequences. He opined that if the man tests positive and the wife negative, the wedding may still take place either due to pressures from relatives or the man does not inform the woman of his serostatus. Luginaah et al (2005) said that there is an implicit focus on the test results of women since they are perceived as more vulnerable. They further stated that the apparent focus on women does not only betray the aim of the process, but could also create a false impression among men regarding the risks of HIV infection. One of the provisions in the National Guidelines for HIV counselling and testing is that the couples can be seen separately if they so desire, but should be encouraged to share their test results and be made aware of the potential implications of the results on marriage decisions

2.20 Conceptual Framework

The Health Belief Model was be used for this study. The Health Belief Model was one of the first theories of health behavior and one of the most widely recognized frameworks of health behavior. It was developed in the 1950s by a group of U.S. Public Health Service social psychologists who wanted to explain why so few people were participating in programs to prevent and detect disease. In order to find an answer, social psychologists examined what was encouraging or discouraging people from participating in the programs. They theorized that people's beliefs about whether they were or not they were susceptible to disease, and their perceptions of the benefits of trying to avoid it. influenced their readiness to act. A heavy component of the behaving individual's perceptional world and motivation was incorporated into the Health Belief Model by its developers. The model is interactive as each step influences the others, and is based on three primary dimensions. In ensuring years, researchers expanded upon this theory, eventually concluding that six main constructs influence people's decisions about whether to take action to prevent screen for, and control illness. They argued that people are ready to act if they:

- Believe they are susceptible to the condition (perceived susceptibility)
- Belief that the condition has serious consequences (perceived severity)
- Belief taking action would reduce their susceptibility to the condition or its severity (perceived benefits)
- Belief cost of taking action (perceived barriers) are outweighed by the benefits
- Are exposed to factors that prompt action (e.g. a television advertisement) (cue to action)
- Are confident in their ability to successfully perform an action (self-efficacy).

2.21 Application of the Health Belief Model to the perception and attitude of unmarried youths to mandatory premarital HIV testing.

Perceived susceptibility: The belief that HIV exists; that they are at risk of HIV infection; belief that they can be infected with HIV virus through the intending spouse can influence positive perception of mandatory premarital HIV testing. If they do not see that they are at risk of HIV infection, they may have a negative perception of mandatory premarital HIV testing. A study revealed that 67% of youths did not believe that HIV/AIDS existed and were not bothered by it.

Perceived severity: Belief that HIV/AIDS causes is a serious disease that causes other diseases and death. Belief that not knowing their HIV status can cause serious consequences. Such beliefs can influence a positive perception of mandatory premarital HIV testing. There already exists the belief that HIV/AIDS is a killer disease.

Perceived benefits: Belief that taking action would reduce their susceptibility to the condition or its severity. If unmarried youths believe that going for mandatory premarital HIV testing would help them know their HIV status, that of their partner and take further preventive actions if they test negative or get access to counseling and treatment to reduce severity if they test positive, they are likely to have a positive perception of mandatory premarital HIV testing.

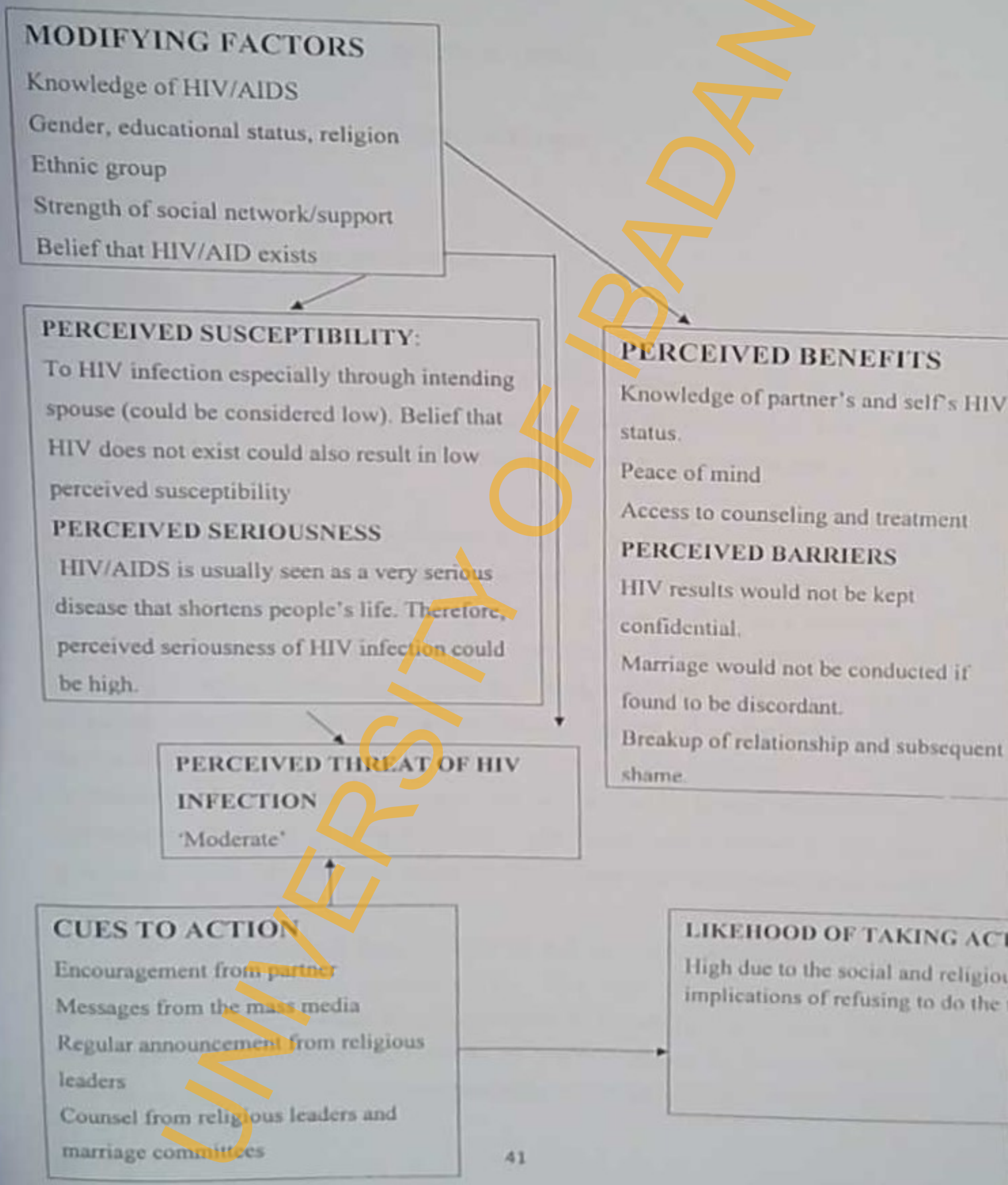
Perceived barriers: Belief about the material and psychological costs of taking action. The perceived barriers could be the belief that tests results would not be kept confidential, that the clergy of the religious organization mandating the test would refuse conducting the wedding if either of the partners tests positive, possible breakup of the relationship with the attendant stigma and discrimination, the thought of having to start another relationship or remaining single for life. If these perceived barriers outweigh the benefits, they could influence the negative perception of mandatory premarital HIV testing.

Cues to action: Factors that can prompt positive perception and action could be the willingness of the other partner to do the test, messages in the mass media urging people to go for HIV testing, premarital counselling by religious leaders, marriage committee etc.

Self-efficacy: Confidence in ability to successfully perform the action.

Perceptions are modified by an individual's personal characteristics and social setting as well as by his/her perceptions and extent of the changes and costs that the recommended action is likely to require.

Fig. 2.1. The Health Belief Model applied to the perception of mandatory premarital HIV testing



CHAPTER THREE

METHODOLOGY

3.1 Study Design

The study was a cross sectional survey.

3.2 Study Site

The study site was the Ibadan Northwest Local Government Area of Oyo State. Oyo state has 33 local governments of which 11 are in Ibadan, the state capital. Out of these 11, 5 are in Ibadan metropolis while the remaining 6 are at the various outskirts of the city.

Ibadan Northwest Local Government is one of the local governments located in Ibadan metropolis with the headquarters in Onireke. It was carved out, alongside others from the old Ibadan Municipal Government on 27th August, 1991.It has a population of 152,834 people of which 77,523 are females while 75,311 are males (2006 census). The inhabitants of Ibadan Northwest are mostly the Yorubas while the main occupation there are trading and working in the civil service. Ibadan Northwest is bounded on the north by Ido Local Government, on the south by Ibadan Southeast Local Government, on the west by Ibadan Southwest Local Government, and on the east by Ibadan Northeast Local Government. There are 6 primary health centers (government-owned) in the local government. There are also other private health facilities including herbal homes in the local government.

The local government is made up of 11 political wards. A large number of the communities in the local government are inner core (indigenous) communities characterized by poorly planned housing and absence of good drainage systems. The rest are transitory and peripheral areas which are mostly populated by the non-indigenes. Christianity and Islam are the two dominant religions, though traditional religion still has

a stronghold especially in the inner core communities. As with other places in Nigeria, there are many churches and mosques in the local government and the faithful of these two religions and other religions live together in the same community. Moreover, a substantial number of religious organizations that require premarital HIV testing are in Ibadan Northwest Local Government. Hence, it served as an appropriate site for the study.

3.3 Study Population

The population for this study were unmarried youths who were within the 15-24 years age range in the study site.

3.4 Inclusion Criteria

The inclusion criteria for this study included the following:

1. Being single (never married but willing to marry)
2. Being a resident in the selected community
3. Within the 15-24 year age bracket

3.5 Population Sampling

Sample size

The sample size was determined based on the percentage of people who desired HIV test to fulfill religious marriage requirement in the 2005 National HIV/AIDS and Reproductive Health Survey. Thus, the sample size was calculated using the formula

$$N = \frac{(Z\alpha + Z\beta)^2 pq}{d^2}$$

Where, n= the desired sample size

$Z\alpha = 1.96$

$Z\beta = 0.84$ (standard normal deviate for 80% power)

p= estimate of key proportion (3% or 0.03)

q= 1-p (1-0.03 = 0.97)

d= degree of accuracy desired (0.02)

$$N = \frac{(1.96+0.84) \times 0.03 \times 0.97}{(0.02)}$$

$$N = 570$$

In order to obtain whole numbers in calculating the required sample size for each stratum, the calculated sample size was increased to 571.

3.6 Sampling Technique

A three stage sampling technique was used for this study. It involved the following stages.

Stage 1: Using stratified random sampling, the communities in the local government were stratified into inner core, transitory and peripheral thus giving a ratio of 28:15:17 in that order (appendix 5). This ratio was further used to calculate the sample size for each stratum thus giving a sample size of 266, 143, and 162 for the inner core, transitory and peripheral strata respectively (appendix 6).

Stage 2: Using a systematic random sampling, 7 communities were selected from the inner core stratum while 4 communities each were selected from the transitory and peripheral strata respectively (appendix 6). The ratio 7:4:4 was then used to calculate the number of respondents to be interviewed from each of the selected communities which gave a figure of 38 respondents in each of the selected inner core communities, 36 in each of the selected transitory communities and 41 respondents in each of the selected peripheral communities (appendix 6).

Stage 3: The households from which the respondents were interviewed were then selected through systematic random sampling. In each selected house, the questionnaire was administered to a consenting unmarried youth who met the criteria for the study.

3.7 Data collection methods

The study was conducted in two stages using both qualitative and quantitative methods of data collection.

3.8 Data collection instruments

Both qualitative and quantitative instruments were used for the study.

i) Qualitative Method

A focus group discussion guide which contained 9 questions was used to elicit information from the discussants concerning their concerns about HIV/AIDS, as well as their awareness, attitude towards and opinion of mandatory premarital HIV testing. Six Focus Group Discussions were held in selected communities, three each for male and for female participants. There were between five to six participants in each session and the average duration of the discussion was 42 minutes. Purposive method of recruitment was used in the recruitment of participants. According to Ajuwon (2007), the selection process for Focus Group Discussion is neither systematic nor random. The researcher moderated at each of the sessions while 3 trained research assistants (2 note takers and an observer) also assisted the researcher in the sessions.

ii) Quantitative Method

The findings from the FGD were used in modifying some aspects of the questionnaire in order to make it more encompassing in addressing the study objectives after which it was pretested. The semi-structured questionnaire, which was interviewer-administered, was divided into five (5) sections namely: demographic characteristics, knowledge of HIV transmission and prevention, awareness of mandatory premarital HIV testing, attitude towards mandatory premarital HIV testing and perception of mandatory premarital HIV testing. The modified questionnaire was then administered to the selected participants. This concluded the second stage of the study.

3.9 Validity

Validity, which is the ability of a test or an instrument to measure what the investigator wants to measure was ensured by the following steps:

1. A draft of both the questionnaire and the FGD guide was constructed by consulting relevant literature
2. The draft instruments underwent an independent review from peers and experts in the field of public health and statisticians
3. It was also presented at the proposal seminar where inputs were made and together with supervisor's review were used in fine-tuning the instruments

4. The instruments were translated to Yoruba language and were also translated back into English language independently.
5. Then both instruments were pretested in a location with similar characteristics as the study site and modifications were made to the instruments before the commencement of the main study.
6. To ensure that the study findings are generalizable, an affordably large sample size was used.

3.10 Reliability

To ensure the reproducibility of the data that was obtained through these instruments, the following steps were taken. The research assistants who collected the data were trained appropriately. The instruments were translated into Yoruba language- the common language spoken in the study site and were also administered in Yoruba language to participants who were not fluent in English language. In addition, the instruments were pretested in a local government having similar characteristics with the study site. The pretested questionnaire was also analyzed using the Cronbach's Alpha model based on standardized items. A reliability coefficient of 0.781, higher than the average correlation coefficient of 0.5 was obtained, thus showing that the instrument was very reliable.

3.11 Pretest of the instruments

The FGD guide and the questionnaires were pretested in Ibadan Southeast Local Government in the months of December 2007 and January 2008 respectively. Ibadan Southeast Local Government was chosen as the pretest site due to the similarity it shares with the study site in terms of socio-economic, religious and other characteristics. Just as it is with the study site, communities in the pretest site are also segregated along the peripheral, transitory and inner core strata. During the pretest, participants voluntarily participated in the study and more participants were recruited in the evenings and weekends than at other periods.

The pretest helped the researcher to determine the trend in the response of participants and the amount of time it took to administer the questionnaire. The level of comprehension of the items by the participants was also determined. At the end of the

exercise, items that were not easily understood were reframed, those that were found to be irrelevant were removed, adequate spaces were provided for responses, and some questions were added while the items were rearranged to follow logical sequence. The pretest questions were then analyzed using the SPSS.

3.12 Procedure for data collection

After the modification of the instruments, three research assistants were further trained for the study. The research assistants were trained in the following areas; the objectives of the study, basic facts on sampling procedure as well as a review of the instruments item by item in order to ensure adequate understanding of the instruments, appropriate recording of responses and seeking clarification in case of unclear responses, communication skills. In addition, ethical issues such as obtaining informed consent respect for privacy and human dignity as well as confidentiality of information were explained to the research assistants.

The research assistants with the researcher were involved in the collection of the data. Data collection took place in the evenings on week days and in the mornings and evenings of weekend days when it was easier to get the participants. The filled questionnaires were submitted to the researcher at the end of each day of the period of data collection and were screened before the research assistants left. Short debriefing sessions were also held at the end of each day where the day's work was reviewed and the next plan of action disseminated to the research assistants.

3.13 Data management and analysis

The FGD discussions were recorded on audio tapes, transcribed and analyzed using the thematic approach. Responses were summarized into themes and were developed and compared within and between groups. The audio tapes were stored in a secure place with only the researcher having access to it.

The filled questionnaires were serially numbered for easy identification and sorted out. An appropriate coding guide was prepared and the questionnaires were coded using this coding guide while some of the items of the questionnaires were scored. The data were then entered into the computer for cleaning and statistical analysis. The SPSS version 14

was used in analyzing the data. Frequencies were generated for all the variables while some items were cross tabulated with other variables to determine the strength of their relationship. The Chi-square and descriptive statistics were used in the analysis of the data. The results were presented in tables and charts.

3.14 Ethical considerations

The study was conducted in accordance with the stipulated ethical norms concerning the use of human participants in research. The following steps were taken to ensure the ethical conduct of this research.

1. Adequate information on the study was given to the respondents in the language they understood.
2. In the collection of both the quantitative and qualitative data, the informed consent of the participants was sought and participants gave verbal informed consent.
3. Confidentiality of information supplied by the participants was ensured as columns for names or addresses were not included in the instruments. In addition, the collected data were securely kept to prevent any loss and unauthorized access.

3.15 Study Limitation

A limitation of this study was that the study had an unequal number of Christian and Muslim respondents as the number of Christian respondents were much higher. Also, respondents selected for the study were limited to those whose age range was between 15 to 24 years, the youth age range according to WHO and UN. The views of the unmarried whose age range were above the upper limit could therefore not be gotten and these results cannot be generalized on them. Again, respondents were not asked about there knowledge of existing national and international guidelines on HIV testing which could have revealed whether it had an influence on their perception of mandatory pre-marital HIV testing

CHAPTER FOUR

RESULTS

The findings from this study are both qualitative and quantitative. The qualitative results were obtained from the FGDs while the quantitative results were obtained from the survey. The findings from this study is therefore presented in both the qualitative and quantitative formats.

4.1 Qualitative Results

4.1.1 Concerns of unmarried youths about HIV/AIDS

The majority of the participants said the fact that the disease has no cure was of concern to them. According to a male participant, '*it has made me not to like having sex and when am having sex and I remember, I feel afraid.*' Some participants concerns about HIV/AIDS were that it is a killer disease, cuts the life of people short and spreads fast. One discussant said '*even if a person has a bright future, if he should be infected with HIV, he will not be able to achieve anything because his life will be cut short.*' A few of the discussants gave the following responses;

> *'Anyone who has it is no longer a human being; God will not make me to have it', 'I see people with HIV as people without hope'*
>
> *'Having it is just as if the end of the world has come'*

Some female participants said their concerns were that HIV/AIDS could be transmitted from mother to child and could make a person commit suicide since it is regarded as a death sentence while another female participant said she would not want to be close to an HIV positive person due to the fear of infection. A male and another female participant said there are no specific/noticeable symptoms that one would see in HIV positive people, '*they only tell us that they will be coughing and look*

emaciated' said the male discussant. A male participant said further that the name of the disease itself is of concern to him.

Two female participants said people are now afraid to use sharp objects that others have used while another female said '*even if you want to go and do your hair, you will be afraid.*' A male participant said the fear of HIV has made him not to start having sex when he is into a new relationship. He and another male participant said they have resorted to using condom.

4.1.2 Knowledge of unmarried youths about mandatory premarital HIV testing

Almost all the participants said they had heard about premarital HIV testing, that the clergy in some religious organizations tell intending couples who come to indicate their intention to marry to first go and do HIV test and that the test is made mandatory in some religious organizations. Some of them added that it was to prevent HIV transmission to the child the couple would have while another discussant said it was to protect the nation. A female participant said '*I have heard about it but am not sure if they will cancel the wedding if one of the partners tests positive.*' A few of the male participants however said they do not know and have not heard about it. One of them said '*the only thing I know is that there should be no sex before marriage*' while another said '*I do not know much about it but I know people will not be bold to go for such a test.*'

4.1.3 Religious organizations that demand premarital HIV testing

About the question on religious organizations that demand HIV test from intending couples, the commonly mentioned religious organizations by the discussants were:

- Deeper life Church
- Gospel Faith Mission
- The Baptist Church
- The Catholic Church
- Christ Apostolic Church (especially CAC Adamasingba)

Other less commonly-mentioned religious organizations included

- The Methodist Church
- Redeemed Christian Church
- Watchman Church
- New Covenant Church
- Winners' Chapel
- The Blood of Jesus Church
- The Anglican Church
- Ahmadiya

4.1.4 How participants got to know about mandatory pre-marital HIV testing

Most of the female participants and two male participants said in the church that they attend or once attended, the announcement is usually made that anybody that wants to marry in the church must first go for HIV test with his/her partner. Two other female participants said they got to know through their sister and a relation that got married in the recent past. Few others said they heard about it from friends but they have not confirmed it.

4.1.5 Views of unmarried youths concerning premarital HIV testing

Almost all the participants said that mandatory premarital HIV testing is good. The reasons included.

- That it would make the partners to know their status
- That it would protect their would-be children/new generation from HIV infection
- That it would prevent the further spread of the infection
- That it would not be after the marriage that they will now discover that one of them has HIV
- To protect the uninfected partner
- To reduce the number of deaths due to HIV/AIDS

A male participant said *'this is the computer age and there are many ways of getting infected, so it is necessary for HIV test to be demanded before marriage.'* Another male discussant said *'if they now know after the wedding, it could cause depression and they could even kill each other in the house.'* In addition, a male participant said *'even people will be spreading the news of the HIV/AIDS disease that killed the parents of children whose father or mother died of the disease, so I support mandatory premarital HIV testing.'* One other male participant said *'it is good because if I want to marry a woman without knowing that she is HIV positive, my family will become an AIDS family, but if we do the test and I know, I will quickly quit the relationship to marry another person.'* A female participant said *'it is good because it will make spinsters not to engage in premarital sex so that their wedding will not have to be cancelled because they are HIV positive.'*

However, a female participant said mandatory premarital HIV testing is not good because if one of the partners tests positive, he/she may not be able to marry again. Also, a male participant said for partners that have been together for 4-5 years, it was possible that they would have been having sex. According to him, '*if they do the test and one of them now test positive, they cannot quit the relationship because both of them would already have become one.*' Another male participant said mandatory premarital HIV testing is not okay and sees it as a distraction while yet another male participant said it was not necessary for the partners to do any HIV test when they have indicated that they want to marry.

4.2.1 Benefits of mandatory premarital HIV testing

The typical responses of the participants about the benefits of mandatory premarital HIV testing were that

- It would prevent further spread of the infection
- It would help the partners to know their status
- It would prevent the shifting of blame by the husband to the wife after the wedding
- It will prevent the couple from regretting the decision to marry each other

The majority of the female participants said mandatory premarital HIV testing would prevent HIV infection from being transmitted to the children. A female participant also said '*it will prevent the marriage from breaking up.*' While another female participant said '*it will help my life to be safe because there is no how I will marry a man that tests positive no matter the length of our relationship.*' Two male participants said mandatory premarital HIV testing would make the couple to enjoy each other, have trust in each other and be free from problems once they test negative.

4.2.2 Disadvantages of mandatory premarital HIV testing

The disadvantage of mandatory premarital HIV testing as said by most of the participants is that it could lead either of the partners, especially the partner who tests positive, to commit suicide. Other disadvantages mentioned are that it could cause pain, depression, heartbreak and shortening of lifespan. They added that it takes time to build a

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relationship and that the partners would have been together for long and would be much in love. Some of the male participants also said

- *'it causes problems for the parents and loved ones of the partner who tests positive'*
- *'makes the man to lose his investments on the lady'*
- *'the relationship could break if any of them tests positive'*
- *'it could make either of the partners decide never to marry again if they separate as a result of HIV infection'*

A female participant said '*it will cause a lot of pain to the woman if she tests positive because it will be painful for her to lose the man she wants to marry*' while another female said it may take a long time for the HIV positive partner to pick up the pieces of his/her life. A male discussant said the disadvantage there is that one of the partners may refuse to do the test and that may lead to the end of the relationship. Another male participant said '*as for me, there is no way I would love a lady, if I hear that she has HIV I will not marry her again and you know the lady could hang herself as a result.*' In addition, a male participant also said '*the disadvantage is that if the two partners have secretly sworn to an oath to marry each other, how can they now separate if one tests positive? Because separation means the oath has been broken and the person who breaks an oath/covenant will pay for it with his/her life. So they cannot leave each other and that is a great problem.*' One female participant however said that there is no disadvantage in mandatory premarital HIV testing.

4.3 Perceived reasons religious organizations require HIV testing before conducting wedding for couples

In response to this question, some male participants said religious organizations do demand HIV test from intending couples so as to protect the image of the church/mosque and that of the clergy in charge because '*a good name is better then gold.*' A male and a female participant said they should require HIV testing so that they would be able to help the HIV positive partner since religious organizations are known to help their members. A discussant said there is a high level of promiscuity among the unmarried, hence premarital HIV testing should be made mandatory for intending couples while another said it was to

minimize the spread of the infection since there is a high prevalence of HIV/AIDS. Some of the male participants said religious organizations should demand premarital HIV test from intending couples due to the following

- To know who has the virus
- To know who to conduct the wedding for and who not to conduct the wedding for
- To make HIV vanish from the next generation
- To correct the mistakes (of conducting wedlock for discordant couples) made in the past
- To make the partners have trust in each other (if they both test negative)
- To make the unmarried people to be patient and wait till after marriage before having sex

A male participant said further that if religious bodies demand premarital HIV testing, members of such religious bodies would be able to trust each other and know those that are infected and those not infected. '*You know if a person test positive, he/she will be ashamed to come to the church/mosque.*' A female participant said they should request for it because they are places of worship and would not want anyone with such disease. Again, a male participant said '*they would not want diseases among their members, so they should request for it.*' Another female participant said it was to fulfill the holy injunction to '*test/investigate all things.*' Yet another female participant said the purpose is to help the partners and the family of the infected person '*because if they have been sharing any sharp object with him/her, they will stop it.* A male participant put it like this, '*if they do not make it mandatory, you know especially in churches where members marry one another, they will be spreading the infection among themselves, by the time the symptoms start appearing, people will tag such church as AIDS church.*'

4.3.1 Participants' view of what could happen if either of the intending couple tests positive

Almost all the participants said that would mean the end of the relationship, as it was impossible for an uninfected person to marry an HIV positive person. According to a male discussant, '*all these talk that people should not stigmatize HIV positive people are all lies because people will run away from such a person, they would think they could be*

infected if they stay near or allow the person to touch them.' other typical responses are the following.

'*Even if some claim to love their partner more than anything, they will quit if the partner tests positive, even if such a person does not want to quit the relationship, friends and family members will tell him/her that it was from promiscuous living that the other partner got the infection and since God has caught the person by making him/her to test positive, the uninfected partner should quit.*'

'*If it is the religious organization that made the test mandatory, they can no longer marry but the church/mosque should help the infected partner since he/she got to know his/her status through the insistence of the church/mosque.*'

'*If the uninfected partner so much loves the HIV positive partner, he/she may commit suicide because he/she will believe that it is better to die just as the infected partner will eventually die from AIDS.*'

'*It will cause shame especially if the two partners had been known and seen together by many people before the test.*' *The uninfected partner could carelessly tell people who ask him that his partner is a promiscuous person and has HIV, this can lead to stigma.*'

A male participant said '*as for me, if the result shows that my partner has the virus, I will quit the relationship unless there is a proven method/way whereby we can be having sex together and I will not be infected. I do not even know where she contacted it and would not want her to put me into trouble.*'

Another male participant said '*if it is the female partner that has HIV, the man could kill her because he will assume that she was unfaithful to him.*'

A male participant said the man could still marry the HIV positive partner due to the love between them but that the family of the man disagree would with him and tell him to quit the relationship. Another male participant said the partners would have to leave each other but that it will not be easy especially if the relationship has been on for a long time. The best thing, as he said, is to do the test before thinking of marriage. A female participant said that they cannot leave each other if they love each other because '*love is everything.*' According to her, '*the HIV positive partner can be given drugs that will ensure that the virus is not transmitted to the uninfected partner.*' Another female participant said '*one man's meat is another man's poison, there could be some that may still insist on marrying*

the HIV positive partner but the best choice for them is to separate.' Yet another said '*they can still marry but will not have sex*' while a female participant said further that '*in my church, if the uninfected partner insists on marrying the HIV positive partner, the church will still join them together but they only want the couples to be aware of their status. In my own view, they should separate.*' Other responses from the female participants are the following.

'*In my own case, I cannot marry such a person. Even if we are using condom, it will not be for life and we will also like to have children, so I do not know what kind of marriage that will be.*'

'*People have individual differences and if the man is infected, the woman may say she is no longer interested because she is a woman.*'

'*Even if he is using drugs, I will not believe that the drugs can cure HIV so I cannot marry him.*'

'*The partner who tests negative will be afraid that he/she will be infected and will not want to marry the person again.*'

4.3.2 Participants' view of religious organizations that refuse to conduct marriage for discordant partners

There were gender differences in the responses to this question. While all the male participants supported the decision of some religious organizations not to conduct marriage for intending couples when one of them is positive, most of the female participants said such a decision was wrong and that it is not the right of such religious organizations to decide for the intending couple. Those who spoke in support of the decision of the religious bodies added the following.

- Other unmarried people will learn a lesson and will abstain from premarital sex
- Joining discordant couples together is ungodly
- Joining discordant couples together in wedlock will set a bad example and encourage promiscuity among the members of such religious bodies
- It will prevent the spread of the infection to the incoming generation

A male participant said '*we have seen a situation where an intending couple still went ahead to marry after test had shown that they were both 'AS' but they had sicklers as*

children, so it is good that religious bodies should refuse to conduct a wedding in which either of the couples tests positive for HIV.' Another male participant said '*I cannot blame such religious bodies because they would not want to tarnish the their image, you know if people hear that a religious organization joins such couple in wedlock, that could lead to the breakup of the church/mosque and the blame will be on the clergy there.*' A participant also added that it is very important for such wedding not to be conducted especially in churches of nowadays where members marry among themselves.

Other reasons given by those who support the decision not to conduct the wedding for such couples included;

- To prevent the transmission of the virus to the uninfected partner and to the children that would come from such union.
- To prevent the breakup of the marriage.
- To prevent the life of the uninfected partner from being ruined by the HIV positive person.
- 'They feel such a couple will not have a happy marriage'

A female participant added further that '*people do ask for the church/mosque a person is attending and if they now know such a couple got married in one's church/mosque, they will see every member of the church/mosque as HIV positive.*' Another female participant said that the religious organization might just postpone the wedding and not cancel it because; '*the clergy too are human beings and that the HIV positive partner could be treated in UCH or another place*'. She also said '*I believe HIV can be cured since it is not yet AIDS, but if they cancel the wedding, that is the end.*' The participants that opposed such decision said that it was not the business of the religious organizations to refuse conducting the wedding once the partners are aware of the status of each other, love each other and want to marry each other.

4.3.3 Discussants' view on actions they will take if their partner refuses to go for pre-marital HIV testing as required by their religious organization

The majority of the participants (more males than females) said they would 'pet' or counsel their partner on the need to do the test. The female participants that said they would talk to their partner on the need to do the test and also said they would tell the

friends or parents of the man to talk to him. Only one male participant said he would look for an elder in the family of the woman who would talk to her. Also, some of the male participants said they would force the woman and/or frighten her that they will cancel the wedding plans. One said he would beg such partner and the other said he would use everything on earth to beg the woman. Another male participant said '*I will be afraid especially if we had had sex. I will try and beg and encourage her to do the test.*'

The male participants said they would discuss with their partner who is refusing to do the test one-on-one and tell her the following.

'The advantages that is inherent in doing the test'

'That if she truly loves me and she is faithful, should do it'

'That it is the rule/doctrine of my church'

'That she should be courageous'

'That the test would bring out whatever is in darkness'

'That it does not mean I would quit the relationship in spite of what the result may be'

'That it would not cause shame or stigma'

The female participants that said they would talk to the man said they will tell him of the benefits and will talk in a way that would make him to consent. One of them particularly said, '*I will even tell him that if the test shows that he has HIV, I will still marry him, though it is just to make him do the test as I would not marry him if he should test positive.*' Another female participant said she will report the man to the pastor, '*the pastor will talk to him and he will agree.*'

However, some of the participants said they would quit the relationship once their partner refuses to do the test. Typical responses they gave include the following.

'it means each of us will go his/her own way'

'it means he has the virus, we will have to part'

'no matter how strong the love is, we would not marry again'

'I will leave her'

'she will go back to her father's house as I will not marry her again'

A male participant said '*the man should pet the woman, if there is true love and you have been petting her for some time, definitely, she will do it. So separation is not the first thing.*' There was a common feeling among the discussants that refusal to go for

mandatory premarital HIV testing is an indication of HIV sero-positivity of the non-consenting partner. The participants who had earlier mentioned the things they will do to make their partner agree to do the test said after all the efforts, if their partner still remained adamant, they will quit the relationship. They also said the best thing was for the partners to go together to do the test at the same location. A male participant said '*if they go separately, the partner that tests positive could tell the doctor not to disclose his/her status to the other partner, you know doctors keep secrets.*' Another male participant said the family doctor or any other familiar person should not do the test for the partners.

4.4 Participants' view on who should be given the results

This particular question received diverse responses. Majority of the participants said both partners should be given their results right there at the testing center. A male participant added that each partner should first be given the result of his/her partner so that they know the status of each other. Those who want both partners to be given their results said the fact that both partners came together for the test, the need to prevent any confusion or foul play and that the man may go to hide the results if given the two, were their reasons for their response.

A substantial number of the participants (both male and female) would want the two results to be given to the man. The main reason they gave was that the woman might not be able to control her emotions if she is the one that tests positive. According to a female participant, '*the woman can even die there if she is given her result and tests positive but the man can control his emotion.*' '*Women are delicate and do not have strong minds*' said a female while one of the male participants said the man will show the woman the result after collecting it from the doctor before they now go together to their religious leader.

A few of the participants were of the view that the results should first be given to the religious leader of the partners concerned without the partners seeing it. Their reason was that it was the religious leader that made them go for the test. Another male discussant added that the man or the woman might tear the result angrily if given the result and that the family may also start to stigmatize if given the results where one of them is

positive. '*The pastor/imam is the best person to be given the result because they can keep secrets.*'

Few of the discussants said the parents (preferably, the fathers of both partners) should be the ones that should be given the results while a male discussant said the father and mother of the HIV positive partner should first be given the results and not the husband.

4.4.1 Participants' view on who should disclose the results

While many of the participants said it is the religious leader (Pastor/Imam) that should disclose the result to the couple, many others said the doctor should be the one to disclose the results to the intending couple. Reasons given for choosing the religious leader were

- '*People respect the men of God more*'
- '*They can use the word of God to soothe the nerves of the couple*'
- '*They are the ones that mandated the couples to do the test*'
- '*They know how to do it better*'
- '*They can best counsel the infected partner on what to and what not to do, especially so that he/she will not be telling everybody about the status of the former partner.*'
- '*They can use the word of God to disclose the result unlike the doctor who can say it anyhow.*'

Those who said the doctor should be the one that should disclose the results to the couple gave reasons such as '*he is the one that conducted the test*' and '*he knows the problem they have and would be able to tell the partner who is HIV positive the drugs he/she will be using and the food he/she will be eating.*' According to a male participant, '*nobody can be trusted in life, even the pastor or imam could leak out the secret. The doctor should first call the infected partner and disclose the result to him/her before calling on the uninfected partner. He should however not disclose the result of one to the other but tell them to ask each other.*' A sharp reaction came from another male participant who said calling them separately would lead to suspicion and confusion and that the result should be disclosed to both of them at the same time. In

addition, the response from yet another male participant was that the result should not first get to the pastor/imam but that the couple should be told their results before leaving the testing center.

There were two slightly different responses that came from two male participants. One said that the doctor should disclose the results to the couple in the presence of their parents while the other said both the pastor and doctor should sit together with the couple because both are involved and then disclose the results to the couple.

4.4.2 Participants' view on what religious organizations should do if either of the partners tests positive

The main actions that the participants would want religious organizations to take when either of the intending couple tests positive are

- They should counsel both partners especially the HIV positive one
- They should stay close to the infected partner and also play with him/her so that he/she will not suffer from depression
- They should contribute money for the welfare of the infected partner including giving her money to buy antiretroviral drugs
- They should pray for both partners especially the infected partner
- They should cancel the wedding
- They should counsel the uninfected partner to look for another person to marry
- They should counsel the uninfected partner not to engage in HIV risk behaviors
- They should link up the infected partner with organizations that care for people living with HIV
- They should not stigmatize but be praying for the partner with the infection

A female participant said both of them should be counseled because '*if the uninfected partner really loves the HIV positive partner, he may suffer from depression as a result.*' Some of the male participants said prayers should be intensified for the infected partner because God can through the prayers take control of the situation and heal the person of the HIV infection since '*we have heard of a woman who had HIV and went to the mountain top to pray and fast after which she*

went back for the test and now tested negative.' Another said, *'I have even heard of many like that, there is nothing prayers cannot do.'* However, another set of male participants said that organizing prayers for the infected partners would just be a waste of time as *'upon all the crusades and revivals they have been doing all this while, there has never been one in which a person living with HIV/AIDS got healed of the infection.' 'There is no miracle that can happen in such a situation, we have not seen a situation where prayer changed the HIV status of someone to negative. Though we have heard about it, we have not seen it with our eyes.'*

Two other male participants expressed their views on what religious organizations should do in such a situation like this.

'They could still join them together in marriage. There is a way they can still have healthy (HIV negative) children. They can still have sex using condom. So I believe they could still conduct the marriage if there is true love.' 'They should call the two of them after a while and ask the HIV negative partner of his/her views. If he/she insists on marrying the infected partner, there is nothing they can do because love is a strong thing. So, the religious organization can take them to the doctor /hospital where they can be given counsel on how to live their lives as couples as well as give the HIV positive partner antiretroviral drugs.'

4.5 Findings from Survey

4.5. Socio-demographic Characteristics

A total of five hundred and seventy-one youths in the study site were interviewed. Of this number, 266 (46.6%) were from the inner core communities (Table 4.1). Slightly more than half of the respondents were males (300 or 52.5%) (Table 4.1). The ages of the respondents ranged from 15 to 24 with a mean age of 20.6 ±2.6 (Table 1). Three hundred and eighty-five (67.4%) of the respondents were from the 20-24 age group. (Table 4.1). Majority of the respondents 409 (71.6%) were Christians (Table 4.2). The majority of the respondents (306 or 53.6%) were students (Table 4.1). The distribution of the respondents by educational qualification showed that a little above half of the respondents 301 (52.7%) had the senior school certificate as their highest qualification while 4 (0.7%) had no formal education (Table 4.2).

The distribution of the respondents by ethnic group showed that majority of the respondents 463 (81.1%) belonged to the Yoruba tribe, 80 (14.0) were of the Igbo tribe, 4 (0.7%) were Hausas while the rest were of other tribes excepting two (0.4%) who were of the Togolese and Ghanaian nationality (Table 4.2).

Table 4.1. Demographic characteristics of respondents (N=571).

A	Stratum	Frequency	%
1.	Peripheral communities	162	28.4
2.	Transitory communities	143	25.0
3.	Inner- core communities	266	46.6
	Total	571	100.0
B	**Gender**	**Frequency**	**%**
1.	Male	300	52.5
2.	Female	271	47.5
	Total	571	100.0
C.	**Age group (in years)**	**Frequency**	**%**
1.	15-19	186	32.6
2.	20-24	385	67.4
	Mean age = 20.6±2.6	571	100.0
	Total		
D.	**Occupation**	**Frequency**	**%**
1.	Student	306	53.6
2.	Self employed	175	30.6
3.	Private employee	82	14.4
4.	Civil servant	8	1.4
	Total	571	100.0

Table 4.2. Demographic characteristics of respondents (N=571)

E.	Ethnic group	Frequency	%
1.	Yoruba	463	81.1
2.	Igbo	80	14.0
3.	Hausa	4	0.7
4.	Bini	15	2.6
5.	Igbira	3	0.5
6.	Igede	3	0.5
7.	Annang	1	0.2
	Other nationalities:		
	Togolese	1	0.2
	Ghanaian	1	0.2
	Total	571	100.0
F	**Educational qualification**	**Frequency**	**%**
1.	No education	4	0.7
2.	Primary education	25	4.4
3.	JSSCE	59	10.3
4.	SSCE	301	52.7
5.	NCE/OND	148	25.9
6.	HND/First degree	31	5.4
7.	Post -Graduate degree	3	0.5
	TOTAL	571	100.0
G	**Religion**	**Frequency**	**%**
1.	Christianity	409	71.6
2.	Muslim	162	28.4
	Total	571	100.0

4.6 Respondents' Knowledge of HIV Transmission and Prevention

All the respondents had heard about HIV/AIDS before the interview. Table 4.3 shows the results of the respondents' knowledge about HIV transmission. Their knowledge of the various modes of HIV transmission is as follows: unprotected sexual intercourse (556 or 97.4%), unscreened blood transfusion (539 or 94.4%), and sharp objects (553 or 96.8%) Table 4.3.

Their were some misconceptions about HIV transmission among some of the respondents. One hundred and fifty-nine (27.8%) of the respondents said HIV could be transmitted by mosquito bites while 137 (24.0%) said HIV could be transmitted by sharing cutleries. In addition, 216 (37.8%) did not know that HIV infection could be transmitted from an infected woman who is pregnant to the baby in her womb (Table 4.3).

Table 4.4 shows the respondents' knowledge about modes of prevention of HIV infection. Four hundred and forty-six (78.1%) correctly responded that abstinence from sexual activities was a mode of preventing the infection while 535 (93.7%) knew that the screening of blood for HIV could also prevent its transmission.

There were also misconceptions among the respondents on the modes of HIV prevention. Ninety-nine (17.3%) said using drugs after unprotected sex could prevent HIV infection while 208 (36.4%) said prayer/deliverance was a means of HIV prevention (Table 4.4).

Table 4.3. Respondents' knowledge on HIV transmission (N=571)

	Questions on HIV Transmission	Correct Responses N (%)	Wrong Responses N (%)
1.	HIV can be transmitted by mosquito bites	412 (72.2)	159 (27.8)
2.	HIV can be transmitted through unprotected sex	556 (97.4)	15 (2.6)
3.	HIV can be transmitted through unscreened blood transfusion	539 (94.4)	32 (5.6)
4.	HIV can be transmitted by sharing cutleries	434 (76.0)	137 (24.0)
5.	HIV can be transmitted through hugging	540 (94.6)	31 (3.2)
6.	HIV can be transmitted by sharing sharp objects	553 (96.8)	18 (5.4)
7.	HIV can be transmitted from infected pregnant woman to the child in her womb	355 (62.2)	216 (37.8)
8.	HIV can be transmitted by shaking hands	545 (95.4)	26 (4.6)

Table 4.4. Respondents' knowledge of the modes of HIV prevention (N=571)

	Modes of HIV Prevention	*Correct Responses N (%)	*Wrong Responses N (%)
1.	Using drugs after sex	472 (82.7)	99 (17.3)
2.	Abstinence from premarital/	446 (78.1)	125 (21.9)
3.	extramarital sex		
4.	Not hugging	532 (93.2)	39 (6.8)
5.	Not sharing sharp objects	543 (95.1)	28 (4.9)
6.	Screening of blood before	535 (93.7)	36 (6.3)
	transfusion		
	Prayer/deliverance	363 (63.6)	208 (36.4)

*Mutually exclusive responses

4.7 Knowledge grade of respondents

In scoring the knowledge questions, one mark was awarded to each correct response and zero to every wrong response thus generating an 8-point score on HIV transmission and a 6-point score on HIV prevention (14-point score overall). The mean knowledge score was 12.0±1.7 (Table 4.5). The scores were further categorized into poor (0-3 points), fair (4-6 points), good (7-9 points) and very good (10-14 points). Table 5 showed that 521(91.2%) respondents had a very good knowledge of HIV transmission and prevention.

Table 4.5. Knowledge grade of respondents

	Knowledge grade	Frequency	%
1.	Very good (10-14 points)	521	91.2
2.	Good (7-9 points)	44	7.7
3.	Fair (4-6 points)	5	0.9
4.	Poor (0-3 points)	1	0.2
	Total	571	100.0
	Mean knowledge score=	12.0±1.7	

4.8 Perception of Severity and Personal Risk of HIV

Almost all the participants (546 or 95.6%) said HIV could cause diseases that could lead to death (Table 4.6). Only 166 (29.1%) responded that they were at personal risk. The distribution of the respondents' perception of risk by gender showed that 88 (29.3%) of the respondents who agreed they were at risk were males (Table 4.7).

Table 4.6. Respondents' perception of severity of HIV infection

HIV can cause diseases that lead to death	Frequency	%
Yes	546	95.6
No	11	1.9
Not sure	14	2.5
Total	571	100.0

Table 4.7. Distribution of respondents' perception of personal risk of HIV infection by gender (N=571)

Gender	I am at risk N (%)	I am not at risk N (%)	I Don't Know N(%)	Total
Male	88 (29.3)	193 (64.3)	19 (6.3)	300
Female	78 (28.8)	177 (65.3)	16 (5.9)	271
Total	166	370	4	571

4.9 Awareness of Mandatory Pre-marital HIV Testing

Analysis of the respondents' awareness of mandatory premarital HIV testing showed that four hundred and fifty-six (79.9%) of the respondents were aware of mandatory premarital HIV testing (Table 4.8). Three hundred and fifty (76.8%) of those who were aware were Christians, (61.3% of the total study population) (Table 4.9).

Table 4.8. Respondents' awareness of mandatory premarital HIV testing

Awareness of mandatory premarital HIV testing	Frequency	Percentage
Aware	456	79.9
Not aware	115	20.1
Total	571	100.0

Table 4.9. Distribution of respondents' awareness by religion

Religion	Aware	Unaware	Total	X^2	P-value
Christianity	350(85.6%)	59(14.4%)	409(71.6%)	27.82	0.000
Islam	106(65.4%)	56(34.6%)	162(28.4%)		
Total	456(79.9%)	115(20.1%)	571(100.0%)		
Gender					
Male	221 (73.7%)	79 (26.3%)	300 (52.5%)	15.07	0.000
Female	235 (86.7%)	36 (13.3%)	271 (47.5%)		
Total	456 (79.9%)	115 (20.1%)	571 (100.0%)		

4.10 Respondents' Awareness of HIV Testing Centers

More than half of the respondents 321 (56.2%) were aware of HIV testing centers (Table 4.10). However, only 52 (9.1%) could mention any HIV testing center in Ibadan Northwest Local Government.

Table 4.10. Respondents' awareness of HIV testing centers

Options	Frequency	Percentage
Aware	321	56.2
Unaware	250	43.8
Total	571	100.0

4.11 Respondents' attitude towards mandatory premarital HIV testing

The respondents' responses to the attitudinal statements are presented in Table 4.11. Five hundred and twenty-three (91.6%) of the respondents agreed with the statement that churches/mosques should encourage their members to go for HIV test while 32 (5.6%) disagreed. One hundred and forty-six respondents (25.6%) agreed to the statement that HIV test was not necessary once a couple have agreed to marry each other while 395 (69.2%) disagreed. Four hundred and sixty-eight (82.0%) agreed to the statement that mandatory premarital HIV testing is one of the ways the church/mosque could use to protect her members from HIV infection while 71 (12.4%) disagreed.

Furthermore, 134 (23.5%) were of the disposition that premarital HIV testing should not be free while more than two-third of the respondents 391 (68.5%) disagreed with this statement. Slightly more than half (293 or 51.0%) of the respondents were of the disposition that premarital HIV test should not be made voluntary. Three hundred and eighteen (55.7%) respondents agreed that mandatory premarital HIV testing could make intending couples avoid weddings in places where it is required while 188 (32.9%) disagreed.

Less than half (38.4%) agreed that religious leaders still see HIV positive people as morally loose while 284 (49.7%) disagreed. In addition, 324 (56.7%) agreed that a person who tests positive has brought shame to the family while 214 (37.5%) disagreed. More than half of the respondents 338 (59.2%) agreed that mandatory premarital HIV testing will prevent unmarried youths from having premarital sex, 222 (38.9%) respondents disagreed while 11 (1.9%) were undecided. Sixty-nine (12.1%) respondents agreed to the statement that mandatory premarital HIV testing was a waste of time and resources, 479 (83.9%) disagreed while 23 (4.0%) were undecided.

The attitudinal level was assessed by assigning three points to a response that indicated positive attitude and zero to a response that indicated a negative attitude. A 45-point scale was generated and respondents that scored 1-22 points were categorized as having negative attitude while those with 23-45 points were categorized as having positive attitude. Overall mean attitude score was 24.1±5.2 out of 45 (Table 4.12). Table 13 shows the attitude of the respondents according to their stratum, gender and religion.

Respondents who had positive attitude were 361 (63.2%) (Table 4.12). More

respondents in the peripheral areas (72.8%) had positive attitude than those in the transitory (56.6%) and inner core areas (60.9%) ($p<0.05$). More males (67.3%) than females (58.7%) had negative attitude ($p<0.05$) (Table 13). Religion had no significant relationship with attitude ($p>0.05$) (Table 4.13).

Table 4.11. Respondents' attitude towards mandatory pre-marital HIV testing

	STATEMENTS	AGREE N (%)	DISAGREE N (%)	UNDECIDED N (%)
1	HIV/AIDS is a serious problem	532 (93.2)	15 (2.6)	24 (4.2)
2.	Churches/mosques should encourage their members to go for HIV test	523 (91.6)	32 (5.6)	16 (2.8)
3.	HIV test is not necessary once a couple have agreed to marry	146 (25.6)	395 (69.2)	30 (5.2)
4.	Mandatory premarital HIV test is one of the ways the church/mosque can protect members from HIV infection	468 (82.0)	71 (12.4)	32 (5.6)
5.	Mandatory premarital HIV test should be adopted by all churches/mosques	456 (79.9)	83 (14.5)	32 (5.6)
6.	Mandatory premarital HIV test is not a good tool in detecting HIV infection	107 (18.7)	408 (71.5)	56 (9.8)
7.	Mandatory premarital HIV test should not free	134 (23.5%)	391 (68.5)	46 (8.0)
8.	Premarital HIV test should not be made voluntary	293 (51.3)	230 (40.3)	48 (8.4)
9.	Mandatory premarital HIV test can make intending couples avoid weddings in places where it is required	318 (55.7)	188 (32.9)	65 (11.4)
10.	Going for mandatory premarital HIV test will make my HIV status to be known publicly	202 (35.4)	325 (56.9)	44 (7.7)
11.	Religious leaders still see HIV positive people as morally loose	219 (38.4)	284 (49.7)	68 (11.9)
12.	A person who tests positive has put family members to shame	324 (56.7)	214 (37.5)	33 (5.8)
13.	The fear of stigma can make my partner and I not to go for mandatory premarital HIV testing	192 (33.6)	333 (58.3)	46 (8.1)
14.	Mandatory premarital HIV test will prevent unmarried youths from having premarital sex	338 (59.2)	222 (38.9)	11 (1.9)
15.	Mandatory premarital HIV test is a waste of time and money	69 (12.1)	479 (83.9)	23 (4.0)

Table 4.11. Respondents' attitude towards mandatory pre-marital HIV testing

	STATEMENTS	AGREE N (%)	DISAGREE N (%)	UNDECIDED N (%)
1	HIV/AIDS is a serious problem	532 (93.2)	15 (2.6)	24 (4.2)
2.	Churches/mosques should encourage their members to go for HIV test	523 (91.6)	32 (5.6)	16 (2.8)
3.	HIV test is not necessary once a couple have agreed to marry	146 (25.6)	395 (69.2)	30 (5.2)
4.	Mandatory premarital HIV test is one of the ways the church/mosque can protect members from HIV infection	468 (82.0)	71 (12.4)	32 (5.6)
5.	Mandatory premarital HIV test should be adopted by all churches/mosques	456 (79.9)	83 (14.5)	32 (5.6)
6.	Mandatory premarital HIV test is not a good tool in detecting HIV infection	107 (18.7)	408 (71.5)	56 (9.8)
7.	Mandatory premarital HIV test should not free	134 (23.5%)	391 (68.5)	46 (8.0)
8.	Premarital HIV test should not be made voluntary	293 (51.3)	230 (40.3)	48 (8.4)
9.	Mandatory premarital HIV test can make intending couples avoid weddings in places where it is required	318 (55.7)	188 (32.9)	65 (11.4)
10.	Going for mandatory premarital HIV test will make my HIV status to be known publicly	202 (35.4)	325 (56.9)	44 (7.7)
11.	Religious leaders still see HIV positive people as morally loose	219 (38.4)	284 (49.7)	68 (11.9)
12.	A person who tests positive has put family members to shame	324 (56.7)	214 (37.5)	33 (5.8)
13.	The fear of stigma can make my partner and I not to go for mandatory premarital HIV testing	192 (33.6)	333 (58.3)	46 (8.1)
14.	Mandatory premarital HIV test will prevent unmarried youths from having premarital sex	338 (59.2)	222 (38.9)	11 (1.9)
15.	Mandatory premarital HIV test is a waste of time and money	69 (12.1)	479 (83.9)	23 (4.0)

Table 4.12. Attitude grade of respondents

Attitudinal score	No	%
Positive value (23-45 points)	361	63.2
Negative value (1-22 points)	210	36.8
TOTAL	571	100.0

Table 4.13. Distribution of participants' attitude by selected demographic variables (N=571)

Variable	Positive	Negative	Total	X^2	P-value
Stratum					
Peripheral	118 (72.8%)	44 (27.2%)	162 (100.0%)	9.72	0.008
Transitory	81 (56.6%)	62 (43.4%)	143 (100.0%)		
Inner core	162 (60.9%)	104 (39.1%)	266 (100.0%)		
Total	361 (63.2%)	210 (36.8%)	571(100.0%)		
Gender					
Male	202 (67.3%)	98 (32.7%)	300 (100.0%)	4.59	0.032
Female	159 (58.7%)	112 (41.3%)	271 (100.0%)		
Total	361 (63.2%)	210 (36.8%)	571(100.0%)		
Religion					
Christianity	266 (65.0%)	143 (35.0%)	409 (100.0%)	2.04	0.153
Islam	95 (58.6%)	67 (41.4%)	162 (100.0%)		
Total	361 (63.2%)	210 (36.8%)	571(100.0%)		

4.12 Opinions of the Respondents about Mandatory Pre-marital HIV Testing

Table 4.11 shows the opinion of the respondents regarding mandatory pre-marital HIV testing. Majority (82.8%) of the respondents were of the perception that making premarital HIV test mandatory would reduce the spread of HIV/AIDS. A few (16.5%) however disagreed with this statement. In addition, 43.8% of the respondents perceived that mandatory premarital HIV testing would lead to increase in stigma against people living with HIV/AIDS. A larger number of respondents (46.4%) disagreed that mandatory premarital HIV testing would lead to increase in stigma against people living with HIV/AIDS.

Few (25.2%) agreed that mandatory pre-marital HIV testing is a violation of human rights while the majority 419 (73.4%) of the respondents disagreed (Table 4.14). Two hundred and seven (36.3%) of the respondents were of the opinion that canceling the wedding of couples due to discordance in HIV status is an abuse of human rights. However, 346 (60.6%) disagreed with this statement (Table 4.14).

Table 4.14. Respondents' opinions about mandatory premarital HIV testing.

Statement	Agree N (%)	Disagree N (%)	Undecided N(%)
Mandatory pre-marital HIV testing will reduce the spread of HIV	473(82.8%)	94 (16.5%)	4 (0.70%)
Mandatory pre-marital HIV testing will increase stigma against PLWHA	250 (43.8%)	265 (46.4%)	56 (9.8%)
Making premarital HIV test mandatory will reduce promiscuity among unmarried youths	343 (60.1%)	225 (39.4%)	3 (0.5%)
Making premarital HIV test mandatory is a violation of human rights	144 (25.2%)	419 (73.4%)	8 (1.4%)
Canceling the marriage of discordant intending couples is an abuse of human rights	346 (60.6%)	207 (36.3%)	18 (3.1%)

4.13 Preferred place for pre-marital HIV testing

Fig. 4.1 shows the place where the respondents think is the best for intending couples to do premarital HIV testing. Sixty-two percent (351) of the respondents preferred government hospitals, 134(23.5%) preferred private hospitals 57 (10.0%) preferred private laboratories while 29 (5.1%) respondents said they did not know the one they preferred. Government hospitals being well equipped (92 or 26.2%) and private laboratories being well equipped (20 or 35.1%) topped the reasons for the preference of government hospitals and private laboratories respectively (Table 4.15 and Table 4.17). The fact that private hospitals would keep the result confidential (38 or 28.4%) topped the reasons for the preference of private hospitals (Table 4.16).

Fig. 4.1. Preferred HIV testing center of respondents

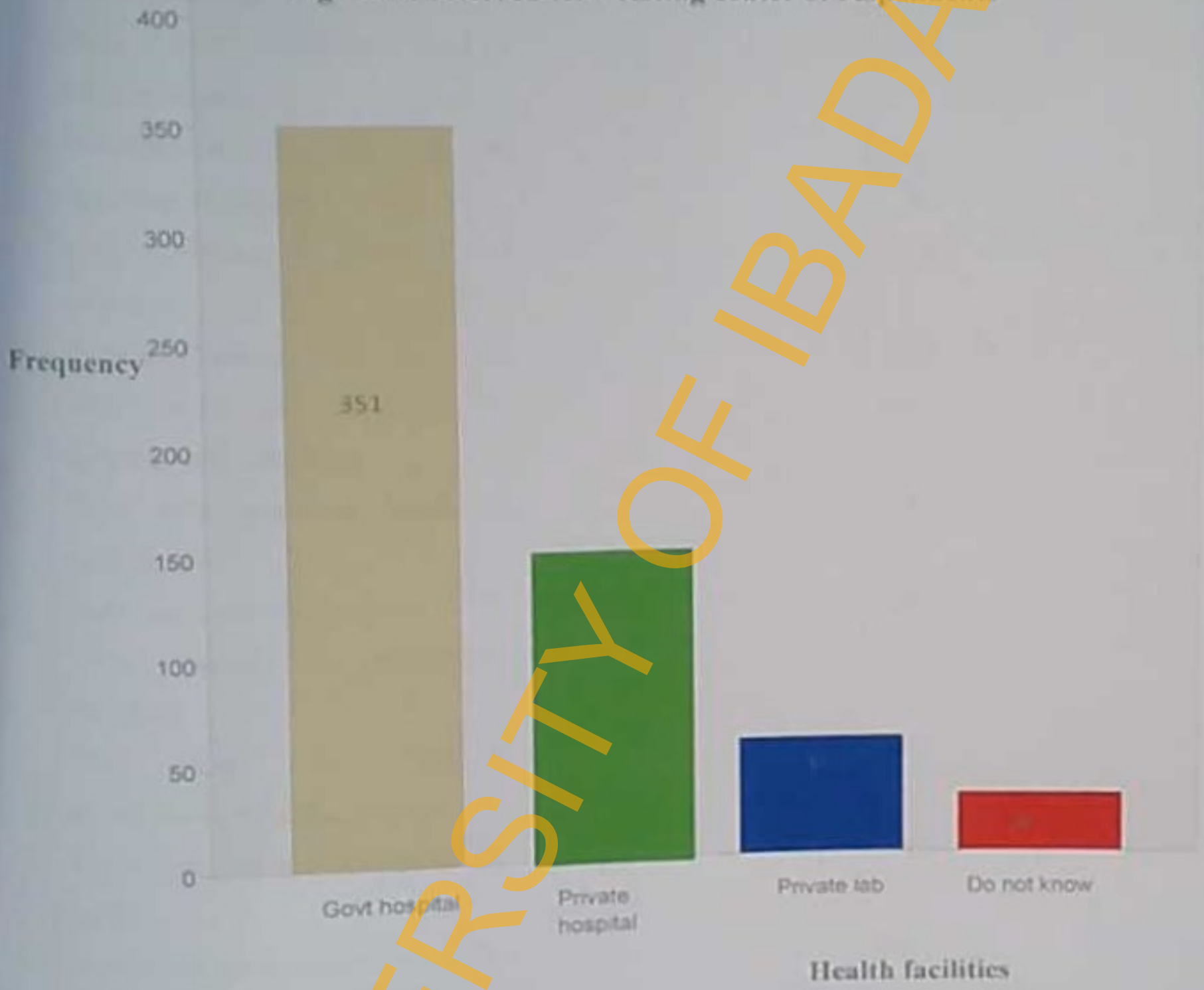

Table 4.15. Respondents' reasons for preferring government hospitals as site for mandatory premarital HIV testing

Reasons	No	%
Government hospital are better equipped	92	26.2
Their staff cannot be compromised	51	14.5
Government hospitals will do it free of charge	46	13.1
They have qualified personnel	45	12.8
They will provide treatment	38	10.8
They will do the test properly and carefully	30	8.5
They will keep the result confidential	24	6.8
They are more recognized	7	2.0
They attend to people promptly	6	1.7
They can be held accountable for their actions	5	1.4
They can handle complex cases	5	1.4
It will help government to know the prevalence of HIV	2	0.6
Total	351	100

Table 4.16. Respondents' reasons for preferring private hospitals as site for mandatory premarital HIV testing

Reasons	No	%
They will keep the result confidential	38	28.4
They attend to people promptly	36	26.9
They are better equipped	24	17.9
Their environment is clean and tidy	13	6.7
Their staff cannot be compromised	9	9.7
They are likely to be familiar with the medical history of couple	5	3.7
They won't detain the couple if they test positive	5	3.7
They have qualified personnel	4	3.0
Total	134	100

Table 4.17. Respondents' reasons for preferring private laboratories as site for mandatory premarital HIV testing

Reasons	No	%
They are well equipped	20	35.1
They will do the test promptly	14	24.6
They will keep the result confidential	10	17.5
The result will be accurate	7	12.3
They are specialist in blood test	4	7.0
They will not detain the couple if they test positive	2	3.5
Total	57	100

4.14 Preferred person to disclose results

Regarding who the best person to disclose the result to intending couples should be, 400(70.1%) of the respondents preferred a doctor in the heath facility where the test was conducted, 116 (20.3%) preferred religious leaders like a pastor or imam, 27 (4.7%) preferred the father of either the man or woman while 3 (0.5%) respondents preferred a friend to disclose the result (Fig.4.2).

Of the 400 who preferred a doctor to disclose the result, 280 (70.0%) stated their reason as being that the doctor conducted the test (Table 4.18) while 103 (88.8%) of those who preferred a religious leader gave their reason as being that the religious leader would pray and give godly counsel to the couple (Table 4.18). Twenty-three (85.2%) respondents who preferred the father to disclose stated that the father has the wisdom to disclose (Table 18) while the three (100.0%) who preferred a friend said a friend is closer to the couple, can be trusted to keep confidentiality and will not stigmatize (Table 4.18).

Tables 4.19 and 4.20 show the preferences by religion and gender of the respondents' regarding the person who should disclose the results to the couple.

Fig. 4.2. Respondents' view on the best person to disclose test to the intending couple

Table 4.18. Respondents' reasons for the choice of whom to disclose the test results

*Reasons for preferring a doctor	No	%
He conducted the test	280	70.0
It is his duty to disclose	255	63.8
He will keep the result confidential	135	33.8
He will provide treatment for positive partner	121	30.3
He will counsel the couple	111	27.8
He will not stigmatize	45	11.3
***Reasons for preferring a religious leader**	**No**	**%**
He will give godly counsel and pray	103	88.8
He is the spiritual leader	71	61.2
He will keep it confidential	57	49.1
He will not stigmatize	41	35.3
He is more respected	34	29.3
He instructed them to do the test	15	12.9
***Reasons for preferring the father**	**No**	**%**
The father has the wisdom to disclose	23	85.2
The father is closer to the couple	22	81.5
The father will not stigmatize	19	70.4
***Reasons for preferring a friend**	**No**	**%**
Friend is closer to the couple	3	100
A friend can be trusted to keep confidentiality of the result	3	100
A friend will not stigmatize	3	100

*Multiple responses

Table 4.19. Distribution of respondents' preference by religion

Variable	Christian N (%)	Muslim N (%)	Total N (%)
Doctor	293(51.3)	107(18.7)	400(70.1)
Pastor/Imam	88(154)	28(4.9)	116(20.3)
Father	12(2.1)	15(2.6)	27(4.7)
Friend	2(0.4)	1(0.2)	3(0.5)
Don't know	14(2.5)	11(1.9)	25(4.4)
Total	409(71.6)	162(28.4)	571(100.0)

Table 4.20. Distribution of respondents' preference by gender

Variable	Male N (%)	Female N (%)	Total N (%)
Doctor	222(38.9)	178(31.2)	400(70.1)
Pastor/Imam	57(10.0)	59(10.3)	116(20.3)
Father	14(2.5)	13(2.3)	27(4.7)
Friend	1(0.2)	2(0.4)	3(0.5)
Don't know	6(1.1)	19(3.3)	25(4.4)
Total	300(52.5)	271(47.5)	571(100.0)

4.15 Test of hypotheses

1. There is no significant relationship between religion and awareness of mandatory premarital HIV testing. This hypothesis was tested using the Chi-square statistics at p=0.05. There was a significant relationship between religion and awareness of mandatory pre-marital HIV testing as the awareness was more among Christian youths (85.6%) than Muslims in the study area (p<0.05) (Table 4.21). Hence, the null hypothesis stated above is rejected.

Table 4.21. Relationship between religion and awareness of mandatory Premarital HIV testing

	Awareness of mandatory premarital HIV testing					
Religion	Aware N (%)	Unaware N (%)	Total N (%)	X^2	df	P-value
Christianity	350 (85.6%)	59 (14.4%)	409 (71.6%)	27.815	1	0.000
Islam	106 (65.4%)	56 (34.6%)	162 (28.4%)			
Total	456 (79.9%)	115 (20.1%)	571 (100.0%)			

2. There is no significant relationship between gender and attitude towards mandatory premarital HIV testing. This hypothesis was tested using the Chi-square statistics at p=0.05. The result showed that there was a significant relationship between gender and attitude towards mandatory pre-marital HIV testing as more males (67.3%) than males (58.7) ($p<0.05$) had positive attitude towards mandatory pre-marital HIV testing (Table 4.22). Hence, the null hypothesis is rejected.

Table 4.22. Relationship between gender and attitude towards mandatory premarital HIV testing

	Attitude towards mandatory premarital HIV testing					
Gender	Positive N (%)	Negative N (%)	Total N (%)	X^2	df	P-value
Male	202 (67.3%)	98 (32.7%)	300 (52.5%)	4.594	1	0.032
Female	159 (58.7%)	112 (41.3%)	271 (47.5%)			
Total	361 (63.2%)	210 (36.8%)	571 (100.0%)			

4. There is no significant difference between age group and perception of mandatory pre-marital HIV testing. This hypothesis was tested using Chi-square statistics at p 0.05. There was no significant relationship between age group and perception of mandatory pre-marital HIV testing ($p<0.05$) (Table 4.23). Hence, the null hypothesis is not rejected.

Table 4.23. Relationship between education and perception relating to mandatory premarital HIV testing

Age group	Mandatory pre-marital HIV testing is a violation of human rights					
	Agree N (%)	Disagree N (%)	Total N (%)	X^2	df	P-value
15-19 years	50 (26.9%)	136 (73.1%)	186 (32.6%)	4.170	1	0.124
20-24 years	94 (24.4%)	291 (75.6%)	385 (67.4%)			
Total	144 (25.2%)	427 (74.8%)	571 (100.0%)			

CHAPTER FIVE
DISCUSSION

This chapter discusses the results of this research. The scope of the discussion includes: socio-demographic characteristics, knowledge of HIV transmission and prevention, misconceptions on HIV/AIDS as well as the perceptions of mandatory premarital HIV testing. The chapter ends with conclusion, implications for reproductive health, recommendations and suggestions for further research.

5.1 Participants' social-demographic characteristics

The study site, Ibadan Northwest Local Government has more of inner core communities and that explains why more of the participants were from inner core communities.

A majority (53.6%) were students. This could be due to the fact that the 15-24 age range for youths, as specified by the United Nations was used for the study. Most people who are within the 15-24 age range in Nigeria are still schooling at the secondary to postgraduate levels. This could be responsible for the studentship status of more than half of the respondents. The larger number of males than females recorded in the study could also be a reflection of the 2006 population census which showed that there were more males than females in Nigeria. According to the 2006 Nigeria population and housing census, the sex ratio was 105 males to 100 females, which shows a slight preponderance of males over females contrary to the long-held belief that the population of females are more . The results also revealed that in Oyo State, there were 2,809,840 males while there were 2,781,749 females (Federal Republic of Nigeria Official Gazette, 2007).

That majority of the participants were Yorubas is expected as the study site is in the southwestern part of Nigeria. This is in conformity with the assertion by Olaseha, Ajuwon and Onyejekwe (2004) that the predominant ethnic group in southwestern Nigeria is the Yoruba ethnic group. Going by the 6-3-3-4 education policy in Nigeria, secondary

education should have been concluded by 18 years of age hence a simple majority of the respondents had the senior secondary education as their highest level of education. However, the findings that only 31.3% had a tertiary education as their highest level of education is a reflection of the difficulty in gaining admission into institutions of higher learning in Nigeria due to the fact that there are usually more candidates than institutions of higher learning in Nigeria can cope with. Though data on religion was not included in the 2006 census, the upsurge in the establishment of churches especially the Pentecostal breed and other Christian activities such as crusades, tele-evangelism and other outreaches has expanded the frontiers of Christianity in Nigeria and has the possibility in increasing the number of the adherents of the Christian faith in Nigeria. This is thus reflected in the larger number of Christians than Muslims in the study.

5.2 Awareness and knowledge of HIV transmission and prevention

The high awareness of HIV/AIDS among participants is similar to the findings of the National Reproductive Health and HIV/AIDS Survey of 2005 in which the awareness about HIV/AIDS was generally high at 94%. Also, a study conducted by Omoigberale et al (2006) among youths aged 15-24 years showed that 56% of them had heard about AIDS though 67% of them did not believe it existed. In recent years, there has been a lot of awareness raising campaigns by both government agencies and non-governmental organizations targeted at youths and other segments of the population. This has had a multiplier effect on the population and as a result, awareness about HIV/AIDS has greatly increased. Knowledge is a key behavioral antecedent though knowledge alone cannot influence behaviour. The high knowledge level of HIV transmission and prevention among the participants is consistent with that of Illiyasu et al (2006), Omoigberale et al (2006), Ekanem and Gbadegesin (2004) and Misiri and Muula (2005). These studies were conducted among different populations ranging from youths, adults to women attending antenatal clinics. They all reported high knowledge of HIV transmission and prevention among their study populations.

The high knowledge of HIV transmission and prevention reported in this study is however in contrast to a study by Wu et al (2005) conducted among premarital couples in China in which less than 15% knew the transmission routes for HIV/AIDS. A report by

the World AIDS Campaign (2008) also revealed that national surveys in 2007 found only 40% of young males (15-24) and 36% of young females had accurate knowledge regarding HIV which was said to be well below the 95% goal for young people's HIV knowledge in the declaration of commitment on HIV/AIDS.

The responses to the knowledge question items were similar to the findings of the NARHS 2005. The routes of transmission of HIV such as unprotected sex, unscreened blood transfusion, sharing off sharp objects and mother to child transmission, which recorded very high correct responses, was consistent with the NARHS 2005. These routes are very common and in the light of the various enlightenment campaigns on HIV/AIDS, it is not unexpected these items recorded high correct response rates.

The knowledge of the participants on HIV prevention also showed a high knowledge with common preventive methods like abstinence, not sharing sharp objects/sterilization and screening of blood before transfusion recording high correct responses. This high knowledge level of HIV transmission and prevention among the participants could be attributed to the various enlightenment programmes on HIV/AIDS

5.3 Misconceptions on HIV/AIDS

The misconceptions on HIV/AIDS transmission among the respondents are similar to that of the NARHS 2005. The misconception that HIV virus could be gotten from mosquito bites could be due to the fact that some people still hold the belief that since mosquitoes suck blood, they could transfer the blood of an infected person to an uninfected person since it is the blood of human beings they suck. Also, since some utensils like spoons and forks make contacts with the mouth in the process of using them to eat, some people believe that sharing such things with an infected person could lead to one being infected, a misconception that was reported among 24% of the participants. According to UNAIDS (2008), the fear of acquiring HIV through everyday contact with infected people because of lack of detailed knowledge and information is one of the root causes of stigma and discrimination.

A major misconception on HIV prevention which had the highest rate of wrong response was that prayer/deliverance was a mode of HIV prevention. According to Pathfinder International (2006) some religious leaders believe that prayer is enough to

protect their followers from AIDS. POZ and AIDSMEDS (2006) reported that Nigerian pastors are claiming a cure for HIV/AIDS. Again, the consistent downturn of the economy has made many people to resort to prayers as their last hope hence their belief in the efficacy of prayer to solve all problems. A study conducted among Christians in Tanzania also revealed the belief that prayer can cure HIV/AIDS. According to Zou, et al (2009) the majority of respondents (80.8%) believed that prayer could cure HIV.

5.4 Perception of risk

The low perception of self-risk of HIV infection among the study participants has also been reported in studies on HIV/AIDS conducted among different populations. According to Wu et al (2005), young people applying for marriage licenses in China most likely did not perceive that they might be at risk of HIV infection. Kilewo et al (1998) in a study conducted in rural Tanzania reported that the main reason people did not volunteer for HIV testing after counselling was that they felt they were unlikely to be infected with the virus implying that they had a false perception of being at low risk. Also, a large proportion of the participants in the NARHS 2005 rated their chances of being infected with HIV low or no chance at all just as 68% perceived they had no risk of having AIDS virus while 20% reported having a low risk in a study conducted by Jiraphongsa et al (2002). Similarly, Chng et al (2005) reported that college students do not see themselves at risk for HIV. According to Habte et al (2003), only 55% of couples that underwent civil marriage in Addis-Ababa reported having had pre-marital HIV testing. The main reason given for not having HIV testing was that the interviewees did not feel at risk of acquiring HIV/AIDS. This low perception of self-risk could constitute a hindrance to going for premarital HIV testing as it gives a false sense of security. Going by one of the key constructs of the Health Belief Model, perceived susceptibility, people's beliefs about whether or not they were susceptible to disease, and their perceptions of the benefits of trying to avoid it, influenced their readiness to act.

However, the finding that shows fewer females perceiving themselves at risk poses a gap in their knowledge as women are more at risk of HIV/AIDS and the infection is more prevalent in females than in males. The 2008 UNAIDS report revealed that in sub-Saharan Africa, women are disproportionately affected in comparison with men. Many

factors operate to increase women's vulnerability. Economically, women have less access to jobs due to limited access to education, they are more into menial jobs, are paid significantly less than men in most cases, they are also less likely to negotiate safer sex. Women's ability to negotiate for safer sex is severely limited in many countries (UNAIDS, 2008). According to Bose and Bhardway (2008), women exercise almost no control over their lives including their sexuality and reproductive choices; have fewer options, and little or no decision-making power in private and public spheres, as a result, the feminization of the HIV epidemic is a worldwide phenomenon. Women are twice as likely as men to contract HIV from a single act of unprotected sex, but they remain dependent on male cooperation to protect themselves from infection. Youth and young adults in Nigeria are particularly vulnerable to HIV, with young women at higher risk than young men (PEPFAR, 2008).

This vulnerability is primarily due to inadequate knowledge about HIV and AIDS, insufficient access to HIV-prevention services, inability to negotiate safer sex, and a lack of female-controlled HIV-prevention methods, such as microbicides. The female condom allows women some control but is not widely used and is relatively more expensive. In some of the regions worst-affected by AIDS, more than half of girls aged 15 to 19 have either never heard about AIDS or have at least one major misconception about how HIV is transmitted

5.5 Awareness of mandatory pre-marital HIV testing

A large majority of the participants were aware of mandatory premarital HIV testing as a wedding criterion by religious institutions. The high awareness rate could be due to the fact that more and more religious bodies are adopting mandatory premarital HIV testing. A documented report by the OSI (2008) indicated that pre-marital HIV testing had started as far as the late 90s in Nigeria when orthodox and Pentecostal churches in Nigeria began to request it from those who wished to marry in the church.

Gender and religion were found to significantly affect awareness, as more females than males and more Christians than Muslims were aware of mandatory pre-marital HIV testing. The reason could be due to the fact that many Christian organizations have already put in place HIV/AIDS programmes targeted at their members and they also have

mandatory pre-marital counseling sessions which take place before the marriage proper. All these have the potential of increasing the awareness of mandatory pre-marital HIV testing among Christians. Also in most religious organizations, especially Churches, there are usually more women than men.

5.6 Perceptions of mandatory pre-marital HIV testing

The assessment of the attitude of the participants showed a positive attitude towards mandatory pre-marital HIV testing. The agreement by a large majority that mandatory pre-marital HIV testing is one of the ways religious organizations can protect her members from HIV infection is consistent with the findings of the study conducted among religious leaders in Ghana. Luginaah et al (2005) reported that the belief that church leaders were genuinely trying to protect those who were HIV negative from becoming infected was the main motivation for imposing mandatory testing on church members. Furthermore, the Church of Nigeria (Anglican Communion) said its decision to make it mandatory for intending couples to be screened for HIV was to contain the spread of the disease. According to PlusNews (2008), the reason behind the intention of several orthodox and Pentecostal churches in Nigeria to promote mandatory premarital HIV testing is to prevent HIV infection, rather than punish those living with the virus. A negative view concerning this has however been expressed by some schools of thought (Bose and Bhardway, 2008; MacDougall, 2008; Tan and Koh, 2008 Nair, 2008). Arguments against it is that it gives a false sense of security, does not empower women to protect themselves and that it would drive the disease underground.

The result also showed that many of the participants agreed premarital HIV testing should not be voluntary. This finding is similar to studies conducted among health workers in North-central Nigeria and religious leaders in Egypt (Musa, 2005; Ragab et al, 2006). The fact that HIV/AIDS is deadly and that intending couples may not volunteer themselves for the test may have influenced participants' disposition. According to Umeora et al (2005), instances of voluntary screening are rare in southeast Nigeria. The same could be said for the other parts of the country. This finding is however not in consonance with some studies and views of some organizations notably human rights. The divergent view is that voluntariness should be the basis of premarital HIV testing (Uneke et al, 2007; Center for the Right to Health, 2003).

Majority would also want mandatory pre-marital HIV testing to be free. Free testing has been found and suggested to be an important factor that enhances acceptability of premarital HIV testing (Musa, 2005; Wu et al, 2005). The disagreement by the majority of the respondents that mandatory pre-marital HIV testing is a waste of time and money is in contrast with some previous studies on pre-marital HIV testing. Petersen et al, (1990) opined that compared with other HIV prevention programs, mandatory premarital screening would be expensive and would probably have a minor impact on the HIV epidemic. According to MacDougall (2008), mandatory premarital HIV testing will be difficult and expensive to enforce, and would divert funds from important prevention/treatment programmes. Furthermore, Kelly and Turnock (1989) in evaluating the effectiveness of mandatory premarital HIV antibody testing as an AIDS prevention strategy reported that in Illinois, mandatory premarital HIV testing had identified few seropositive individuals at enormous cost. Moreover, since intending couples are considered to be a population at low risk of HIV infection, subjecting them to HIV testing is seen as a waste of resources by a school of thought. In the opinion of Cleary (1987) mandatory premarital screening in a population with a low prevalence of infection is a relatively ineffective and inefficient use of resources. This is also in line with the findings of Cock et al (2007) that premarital HIV testing is not cost-effective where prevalence is low. However, Umeora et al (2005) do not share the same view as they recommended that screening intending couples-a population not considered at high risk for HIV infection could play an important role in HIV detection in the general population. This view is in line with a study on premarital HIV-1 testing in New Jersey where Altman, Shahied, Pizzuti, Brandon, Anderson and Freund (1992) reported that percentages of premarital HIV-1 infections were much higher than earlier estimates.

The fact that majority of the participants agreed that mandatory premarital could make intending couples avoid wedding in places where it is required could be due to the belief that any positive result could scuttle the intending wedding. This finding is consistent with the view of Center for the Right to Health (2003) that mandatory premarital HIV testing in the face of intense stigma and discrimination would drive vulnerable people underground and force them to avoid religious weddings completely. Also, studies have shown that in Louisiana and Illinois, the first two states that practiced

mandatory premarital HIV testing in America, there was a decrease in the number of marriage licenses issued during the period the test was enforced while there was an increase in the number of marriage licenses issued by states surrounding them (Petersen et al, 1990; Mckilip, 1991). However, these findings are at variance with studies conducted in Malaysia and Ghana. Khebir et al (2004) reported that in the state of Johor, Malaysia, Muslim marriage applications rose to 2.8% in 2004 compared to 2002 despite the implementation of premarital HIV screening programme. Luginaah et al (2005) in a study conducted among Christian religious leaders in Ghana reported that some of the participants disagreed with the view that mandatory premarital HIV testing might send people underground.

The perception by majority that a person that tests positive had put the family to shame is disturbing as it portends stigma and discrimination of the HIV positive person. HIV positive people need a lot of support and the family is a key stakeholder in the offer of care and support. Participants' disposition towards this statement may have been shaped by the general belief that HIV/AIDS is a disease of the promiscuous and the societal norm that disproves promiscuity. This has the potential of driving the disease underground and making people not to go for premarital HIV testing. Human beings are inherently social animals, and their physical and psychological health is damaged when they are isolated and cut off from their social group (Jenkins and Sarkar, 2007). The issue of stigma and discrimination is a worldwide phenomenon and Nigeria is not an exception as reported by the ThisDay Newspaper, July 28, 2006, the level of discrimination against HIV positive people in Nigeria is still very high.

The perception by majority of the respondents that making premarital HIV test mandatory would reduce the spread of HIV/AIDS is similar to the position of Nganga (2004) that despite social challenges, premarital testing of couples offers opportunity for preventing heterosexual and mother-to-child transmission of HIV as well as orphaning of children. Some other studies however have a different view. Gershaw (1991) opined that unlike vaccinations, HIV testing alone does not stop the spread of infection as it only identifies infected persons. In addition, Asante (2007) stated that given the weakness of health systems in sub-Saharan Africa, particularly the shortage of health personnel, it was doubtful if routine or mandatory premarital HIV testing would lead to any drastic

improvements in HIV prevention or treatment and care in the continent. Some schools of thought also believe that making premarital HIV test mandatory would drive the disease underground thus fueling its spread. According to Human Rights Watch (2006), HIV testing practices that were not voluntary, were not linked to counseling and care, and failed to protect confidentiality effectively discouraged people from seeking necessary care and led to increased stigma and abuse.

Respondents' perception that mandatory pre-marital HIV testing would not lead to an increase in the stigma associated with HIV/AIDS may have been influenced by the fact that religious organizations are compassionate and show care and support to members who have challenges hence there could be no increase in stigma if they make premarital HIV testing mandatory. This view has been brought to the fore by a school of thought. According to Ubuane et al (2000), religious bodies can help reduce stigmatization due to the communal love among its members. In the opinion of Zou, et al (2009) religious organizations are influential social networks that have the power to support or stigmatize people living with HIV/AIDS (PLWHA), promote or impede HIV education, and endorse or reject medical treatment of HIV. The perception of 25.2% that mandatory premarital HIV testing is a violation of human rights is consistent with some other schools of thought (Center for the Right to Health, 2003; MacDougall, 2008; Law and Health Initiative, 2007; Herald News Bureau, 2007; Uneke et al, 2007).

Gender had a significant influence on the perception of the respondents as more males than females had a positive perception towards mandatory premarital HIV testing. That more number of female participants had negative attitude could be due to some beliefs part of which is that mandatory premarital HIV is disadvantageous to women. According to Frerichs (1997), given the current gender roles and norms, it will frequently be women who suffer the consequences because while the man can quit if he learns his potential bride is HIV positive, the wedding may still hold if it was the man who is positive due to pressures on the woman or the non-disclosure of the positive status by the man. In addition, a study conducted by Luginaah et al (2005) revealed that there is an implicit focus on the test results of the female partners, as it is believed that they are more vulnerable. While advocating against mandatory premarital HIV testing, the Malaysian AIDS Council and Malaysian Positive Network (2008) stated that women in particular,

due to their lower status in society, are more likely than men to be vulnerable to discrimination, violence, abandonment and ostracism, if they are found to be infected with HIV. Again, when an intending marriage has to break up due to discordance in HIV status, it could take a longer time for a woman to recover from the heartbreak that result. Hence, these factors could have had an influence on the negative disposition of more of the female participants towards mandatory premarital HIV testing. This finding however differs from what obtains in Senegal where Faye (2003) reported that women groups in that country were urging for the immediate passage into law a bill that would make premarital HIV testing mandatory and that refusal to undergo premarital HIV testing be made a criminal offence.

Majority of the participants preferred mandatory premarital HIV testing to be conducted in government-owned hospitals. This is consistent with the findings of Musa (2005). Furthermore, the majority preferred a doctor to disclose the result. The fact that government-owned hospitals had earlier been indicated as the preferred place for the test might also have influenced their choice of the person to disclose. This could be due to the assumption that only a doctor could conduct an HIV test. This finding is consistent with that of Musa (2005). This finding is similar to a study conducted to assess the utilization of premarital HIV testing services in Addis-Ababa. Habte et al (2006) stated that medical doctors were the preferred counselors by 40% - which represents the highest percentage.

5.7 Implication for reproductive health and rights

The findings show that the respondents have a positive perception of mandatory premarital HIV testing. This however poses a challenge as mandatory pre-marital HIV testing is inconsistent with international guidelines on HIV testing. There is also the genuine concern of mandatory pre-marital HIV driving the disease underground, thus preventing people from accessing care and support and thereby fuelling the spread of the disease and resulting in reproductive ill health. Particularly is the perception among the respondents that more people will avoid religious wedding in places where pre-marital HIV testing is required and that testing positive brings shame to the family. These all have negative implications for reproductive health in Nigeria. Part of the implication is that the reproductive rights of intending couple could be jettisoned as a result of mandatory pre-marital HIV testing especially in religious settings where marriage between discordant

couples is actively discouraged. This equally poses a great challenge considering the fact that many would see the dissolution of such intending marriage as a godly and right thing to do just as this study has revealed.

However, it should also be taken into cognizance that the institution of marriage is fast becoming a vehicle for the continued transmission of the infection. Furthermore, part of the implication of reproductive health, which is that people should be able to practice and enjoy sexual relationships would also be negated if the sexual relationship that is to be enjoyed now becomes a route for the transmission of HIV/AIDS. This then implies that confrontation, enforcing international regulations on HIV testing or using a rigid approach may not ultimately address this issue since it also bothers on religion and Nigeria is a religion-sensitive country. While it may be right for religious organizations to have their own policies as regards HIV/AIDS and marriage, it also behooves on them to ensure confidentiality of the test results and the opportunity given to the couple to make an informed decision on whether or not to go ahead with the marriage in the situation where there is discordance in their sero-status. This can in a way protect the rights of the intending couple. Again, it is not just enough for religious organizations to subject intending couples to pre-marital HIV testing as apart of the criteria for their wedding to be conducted in that particular organization. A key component of reproductive rights is the right to attain the highest standard of sexual and reproductive health and the right to services and information that make this possible. Therefore, there is the need to ensure that intending couples are at this stage provided with the right information and services that would ensure the attainment of the highest standard of reproductive health in spite of their HIV status. This then highlights the crucial role of counselling, both pre- and post-test, in pre-marital HIV testing.

Religious bodies should also facilitate the placement of those who test positive on antiretroviral treatment, even as they ensure that the intending discordant couple has a say in the decision making as they are the major stakeholders in this issue. There also has to be collaboration between religious organizations, government and non- governmental agencies especially in the area of referral for pre-marital HIV testing, antiretroviral treatment for positive cases as well as capacity building of religious leaders in the area of handling sero-positivity among intending couples, maintaining confidentiality and other

issues surrounding mandatory pre-marital HIV testing. In addition, some of the major thrusts identified by the National Reproductive Health Policy and Strategy (2001) could be applied regarding the issue of pre-marital HIV testing. These include advocacy, promotion of healthy reproductive/sexual behaviors especially among the unmarried, equitable access to quality health services which will ensure those who tests positive access quality health care and research promotion.

5.8 Conclusion

The issue of mandatory premarital HIV testing by religious organizations in Nigeria is one that would continue to generate controversies as long as it is in practice. It is both a religious and ethical issue in Nigeria. Stigma and breakup in the relationship/cancellation of the wedding of intending couples who are discordant has the tendency to arise in mandatory premarital HIV testing. However, its effectiveness in curtailing the spread of HIV/AIDS would be dependent on its acceptance by stakeholders including the unmarried population.

This study revealed a high knowledge of HIV transmission and prevention as well as a high awareness of mandatory pre-marital HIV testing among the unmarried youths in the study area. In addition respondents had a positive perception of mandatory pre-marital HIV testing. The positive perception towards mandatory premarital HIV testing by the respondents portends its acceptability among them. However, there still exist some misconceptions about HIV/AIDS while the perception of the risk of contacting the virus was low among the study group. Furthermore, the knowledge of where to go for premarital HIV testing was also low while they still hold the view that testing positive is tantamount to bringing shame on the family. These findings need to be addressed promptly.

5.9 Recommendations

Based on the findings of this study, youth-friendly educational strategies should be used to sustain the positive perceptions of mandatory pre-marital HIV testing among unmarried youths. Specifically, the following are recommended.

1. Advocacy and public enlightenment programmes are needed to promote and sustain the positive perception of unmarried youths towards mandatory premarital HIV testing. This should first be targeted at leaders of youth organizations in both the residential and religious communities.
2. Also, to address the misconceptions identified by this study, more comprehensive HIV/AIDS programme specifically targeted at youths should be organized periodically. Youths' organizations in the residential and religious communities should be identified and used as units of practice for these comprehensive HIV/AIDS programmes. Specifically, these programmes should among other things address misconceptions on HIV/AIDS particularly regarding transmission and prevention, the issue of associating HIV infection with shame and stigma, as well as the perception that the outcome of HIV infection is always fatal
3. Government and non-governmental organizations working in the area of HIV/AIDS should as a matter of urgency liaise with religious organizations demanding mandatory premarital HIV testing in order to conduct capacity building programmes for the clergy and marriage committees in the area of counseling, confidentiality of results, coping well with the issue of discordance and other salient issues concerning mandatory premarital HIV testing.
4. There should be a continuous promotion of premarital HIV testing especially during announcements in religious places as this has the ability to encourage intending couples to go for the test on their own volition even before indicating their intention to wed to the clergy.

5.10 Suggestions for Further Research

This study has revealed the positive perception of unmarried youths towards mandatory premarital HIV testing. However, there is the need to conduct further studies on the self-efficacy and level of confidence of unmarried youths to undergo mandatory premarital HIV testing. Also, there is the need for a qualitative study on the preparedness and strategies employed by religious organizations to cope with issues of discordance in the HIV status of intending couples as well as a follow up study on the outcome and coping mechanisms of discordant married couples.

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Appendix 1

QUESTIONAIRE

UNMARRIED YOUTHS' KNOWLEDGE OF HUMAN IMMUNO- DEFICIENCY VIRUS AND PERCEPTIONS OF MANDATORY PRE-MARITAL HIV TESTING IN IBADAN NORTH-WEST LOCAL GOVERNMENT AREA, NIGERIA

Good day. I am from the Department of Health Promotion and Education, University of Ibadan. I am conducting a study on the unmarried youths' knowledge of human immuno- deficiency virus and perceptions of mandatory pre-marital HIV testing in Ibadan North-west Local Government Area, Nigeria.

The information you give is vital to achieving the goals of this study and would be treated with utmost confidentiality. Your honest responses to the questions will therefore be highly appreciated. Thank you.

Please tick ( ) the appropriate response

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male [ ] 2. Female [ ]
2. Age: _____
3. Occupation: _____
4. Educational qualification: 1. No Education [ ] 2. Primary Education [ ]
   3. Arabic Education [ ] 4. JSS Certificate [ ] 5. WASC/SSCE [ ]
   6. NCE/OND [ ] 7. HND/First degree [ ] 8. Postgraduate degree [ ]
5. Ethnic group: 1. Yoruba [ ] 2. Igbo [ ] 3. Hausa [ ] 4.Others (specify) _____
6. Religion: 1. Christianity [ ] 2. Muslim [ ] 3. African Traditional Religion [ ]
7. Name of the church/mosque you attend: _____
8. Are you presently engaged to be married? 1. Yes [ ] 2. No [ ]

SECTION B: KNOWLEDGE OF HIV/AIDS (Please tick as appropriate)

9. Have you heard about HIV/AIDS? 1. Yes [ ] 2. No [ ]

10i. HIV Transmission	True	False
a. HIV can be transmitted through mosquito bite		
b. It can be transmitted through unprotected sex with an infected person		
c. It can be transmitted if blood is not tested before being given to another person		
d. It can be transmitted by sharing spoons, forks and other utensils with an infected person		
e. It can be transmitted by hugging an infected person		
f. Using infected sharp objects like blade, needles, etc		
g.It can be transmitted from an infected pregnant woman to the baby in her womb		
h. It can be transmitted by shaking hands with an infected person		
10ii. Ways of preventing HIV infection	**True**	**False**
a. Using drugs (antibiotics) after a sexual act		
b. Abstinence (not having sexual intercourse at all)		
c. Not hugging an infected person		
d. Not sharing sharp objects with people		
e. Screening of blood before transfusion		
f. Praying/deliverance		

11. HIV can cause diseases and death. 1. Yes [ ] 2. No [ ]

12. Do you think you are at risk of having HIV? 1. Yes [ ] 2. No [ ]

SECTION C: KNOWLEDGE AND AWARENESS OF MANDATORY PREMARITAL HIV TESTING

13. Are you aware that some churches/Islamic societies ask couples who want to wed to do HIV test before the wedding is conducted? 1. Yes [ ] 2. No [ ]

14. If yes, can you mention such churches/Islamic societies? _____

SECTION B: KNOWLEDGE OF HIV/AIDS (Please tick as appropriate)

9. Have you heard about HIV/AIDS? 1. Yes [ ] 2. No [ ]

10i. HIV Transmission	True	False
a. HIV can be transmitted through mosquito bite		
b. It can be transmitted through unprotected sex with an infected person		
c. It can be transmitted if blood is not tested before being given to another person		
d. It can be transmitted by sharing spoons, forks and other utensils with an infected person		
e. It can be transmitted by hugging an infected person		
f. Using infected sharp objects like blade, needles, etc		
g. It can be transmitted from an infected pregnant woman to the baby in her womb		
h. It can be transmitted by shaking hands with an infected person		
10ii. Ways of preventing HIV infection	**True**	**False**
a. Using drugs (antibiotics) after a sexual act		
b. Abstinence (not having sexual intercourse at all)		
c. Not hugging an infected person		
d. Not sharing sharp objects with people		
e. Screening of blood before transfusion		
f. Praying/deliverance		

11. HIV can cause diseases and death. 1. Yes [ ] 2. No [ ]

12. Do you think you are at risk of having HIV? 1. Yes [ ] 2. No [ ]

SECTION C: KNOWLEDGE AND AWARENESS OF MANDATORY PREMARITAL HIV TESTING

13. Are you aware that some churches/Islamic societies ask couples who want to wed to do HIV test before the wedding is conducted? 1. Yes [ ] 2. No [ ]

14. If yes, can you mention such churches/Islamic societies? _____

15. Is premarital HIV testing required for intending couples by your church/mosque?

1. Yes [ ] 2. No [ ]

16. If yes, for how many years has it been in practice? _____

17. Has there been a time when a wedding was not conducted in your church/mosque because either of the couple tested positive? 1. Yes [ ] 2. No [ ]

18a. Are you aware of any place in this local government where HIV test can be done?

1. Yes [ ] 2. No [ ]

18b. If yes, can you mention any? _____

19a. Are you aware of any place in Ibadan where HIV test can be done? 1.Yes [ ] 2.No [ ]

19b. If yes, can you mention any? _____

SECTION D: PERCEPTIONS TOWARDS MANDATORY PREMARITAL HIV TESTING

I. Attitude towards mandatory premarital HIV testing

Instruction: Please tick as appropriate

	STATEMENTS	Agree	Disagree	Undecided
20.	HIV/AIDS is a serious problem			
21.	Churches/mosques should encourage their members to go for HIV test			
22.	HIV test is not necessary once a couple have agreed to marry			
23.	Mandatory premarital HIV test is one of the ways the church/mosque can protect members from HIV infection			
24.	Mandatory premarital HIV test should be adopted by all churches/mosques			
25.	Mandatory premarital HIV test is not a good tool in detecting HIV infection			
26.	Mandatory premarital HIV test should not free			
27.	Premarital HIV test should not be made voluntary			
28.	Mandatory premarital HIV test can make intending couples avoid weddings in places where it is required			

29.	Going for mandatory premarital HIV test will make my HIV status to be known publicly			
30.	Religious leaders still see HIV positive people as morally loose			
31.	A person who tests positive has put family members to shame			
32.	The fear of stigma can make my partner and I not to go for mandatory premarital HIV testing			
33.	Mandatory premarital HIV test will prevent unmarried youths from having premarital sex			
34.	Mandatory premarital HIV test is a waste of time and money			

II: Opinions relating to mandatory premarital HIV testing

	Statement	Agree	Disagree	Undecided
35.	Mandatory pre-marital HIV testing will reduce the spread of HIV			
36.	Mandatory pre-marital HIV testing will increase stigma against PLWHA			
37.	Making premarital HIV test mandatory will reduce promiscuity among unmarried youths			
38.	Making premarital HIV test mandatory is a violation of human rights			
39.	Canceling the marriage of discordant intending couples is an abuse of human rights			

40a. Where do you think is the best place for intending couples to do premarital HIV testing?

i. Government hospital

ii. Private hospital

iii. Private laboratory/diagnostic centers

iv. Others (specify) _____

40b. What is the reason for your response in 46a? _____

41. Who do you think is the best person to disclose the result to the couple and why?

Please tick only one of the persons

	Doctor	**Pastor/Imam**	**Father of the bride/groom**	**Friends**
Reasons (Tick as many)	He will keep it secret [ ]	He is the spiritual leader [ ]	He has the wisdom to disclose [ ]	Friends are closer [ ]
	He did the test [ ]	He will keep it secret [ ]	He will keep it secret [ ]	Can be trusted to keep secret[ ]
	He will provide treatment [ ]	He will give godly counsel and pray for them [ ]	He is closer to the couple [ ]	Friends will not stigmatize [ ]
	It is his duty to disclose the result [ ]	They are more respected [ ]	He will not stigmatize [ ]	
		He will not stigmatize [ ]		

Appendix 2

FOCUS GROUP DISCUSSION GUIDE

Good evening everybody. How has been your day?

I am Adefioye Olumide, a student in the department of Health Promotion and Education U.I. My assistant is ---------- who is going to write down your responses. We have invited you all to discuss about the issue of mandatory premarital HIV testing with a view of knowing how you feel about it. Please, feel free to contribute. Your responses to all the questions will be kept confidential, so we will be grateful if you give honest responses. We want to seek your permission to use a tape recorder to record this discussion so that no information is lost. Thanks.

1. What are the concerns of unmarried youths about HIV/AIDS?
2. What do you know about mandatory premarital HIV testing? (Do you know churches/mosques that require it? Can you name them? How did you get to know)
3. What is the view of unmarried youths concerning mandatory premarital HIV testing?
   What are its benefits?
   What are its disadvantages?
4. Why should religious organizations require HIV testing before joining couples together?
5. What do unmarried youths think will happen if either of the intending couple tests positive?
6. What is your view about churches/mosques that refuse to conduct marriage for couples in a situation where either of the couple is positive?
7. What actions will you take if your fiancé/fiancée disagrees with you concerning going for premarital HIV test as required by your religious organization?
8. Who should be given the test results
   Who should disclose the results? Why?
9. What should religious organizations do if either of the partners tests positive?

Appendix 3

EDA YORUBA

IMO NIPA HIV ATI OJU TI AWON APON FIWO AYEWO HIV TIPATIPA KI IGBEYAWO TO WAYE NI IJOBA IBILE ARIWA-IWOORUN IBADAN.

Eku ikale. Akeko nimi lati eka to nrisi igbelaruge ilera ti ile iwe giga yunifasiti Ibadan. Mo nse iwadi lori imo nipa HIV ati oju ti awon apon fiwo ayewo HIV ni tipatipa ki eyan to se igbeyawo ni ijoba ibile ariwa-iwoorun Ibadan. Awon idahun ti e ba funwa ni ao se ipamo re daradara ako sini gbayin lakoko. Ao mo riri wipe kie fi tooto inu dahun awon ibeere wonyi.

Ese pupo.

Ilana: Ejowo, e fala si iadaun ti o ye

ABALA A: IBERE NIPA ARA ENI

1. Ako ni abi abo: 1. Ako 2. Abo
2. Kini ojo ori yin? _____
3. Kini ise ti e nse? _____
4. Kini ipele eko yin to gaju?
   1. Mio losi ile iwe 2. Mo kawe alakobere 3. Mokawe larubawa
   4. Mo kawe girama de onipo keta 5. Mo kawe mewa 6. NCE/OND
   7. HND/First degree 8. Postgraduate degree
5. Kini eya yin? 1. Yoruba 2. Igbo 3. Hausa 4. Iyoku
6. Kini esin yin? 1. Esin onigbagbo 2. Esin musulumi 3. Esin ibile 4. Iyoku
7. Kini oruko ile ijosin yin? _____
8. Nje eti ni afesona ti efe fe? 1. Beeni 2. Beeko

ABALA B: IMO NIPA HIV/AIDS (Ejowo, efala si idaun ti oye)

9. Nje eti gbo nipa HIV? 1. Beeni 2. Beeko

	Otito ni	Koribe
10i. Itankale HIV		
a. Kokoro HIV lee tankale nipase ki efon jeyan		
b. Kokoro HIV lee tankale nipase ibalopo alaini idabobo pelu eniti oti ni kokoro HIV		

c. Kokoro HIV lee tankale ti won kobaye eje ti won fa sara elomi wo		
d. Kokoro HIV lee tankale nipase pinpin sibi, fooki ati awon ohun ijeun imi pelu eniti oti ni kokoro HIV		
e. Kokoro HIV lee tankale nipa didimo eniti oti ko kokoro HIV		
f. Kokoro HIV lee tankale nipase lilo awon nkan tomu bi abefele ati abere toti ni kokoro na lara		
g. Kokoro HIV lee tankale lati ara oloyun tono kokoro yii si ara oyun towa ninu re		
h. Kokoro HIV lee tankale nipase bibowo eniti oni kokoro HIV		
10ii. Ona lati dena kiko kokoro HIV	**True**	**False**
a. Lilo ogun leyin ibalopo alaini idabobo		
b. Ki eyan mani ibalopo rara		
c. Ki eyan ma dimo eniti oni kokoro HIV		
d. Ki eyan mapin awon nkan tomu pelu awon eyan mii		
e. Sise ayewo eje kiwon to fasiyan lara		
f. Adura ati itusile		

11. Kokoro HIV lee fa aisan ati iku 1. Beeni [ ] 2. Beeko [ ]
12. Nje ero wipe ewa ninu ewu nini kokoro HIV 1. Beeni [ ] 2. Beeko [ ]

ABALA C: IMO NIPA AYEWO HIV TIPATIPA KI IGBEYAWO TO WAYE

13. Nje emo wipe awon ijo elesin kanwa tiwon ma nkannipa fun awon tobafe se igbeyawo lati kokolo se ayewo HIV? 1. Beeni [ ] 2. Beeko [ ]
14. Ti oba je beeni, nje ele daruko awon tie mo? _____
15. Nje ijo ti eti njosin ma nkan nipa fun awon toba fese igbeyawo lati lose ayewo HIV?
    1. Beeni [ ] 2. Beeko [ ]
16. Ti obaje beeni, otito odun melo tiwon ti nse? _____
17. Se igba kan tiwari tiwonko lese igbeyawo ninu ijo yin nitoripe ayewo fihan pe ikan yala oko tabi iyawo ni kokoro HIV? 1. Beeni [ ] 2. Beeko [ ]
18a. Nje emo ibi ti eyan tilese ayewo HIV ni ilu Ibadan? 1. Beeni [ ] 2. Beeko [ ]
18b. Ti obaje beeni, nje ele daruko won? _____

19a. Nje emo ibi ti eyan tilese ayewo HIV ni ijoba ibile ariwa-iwoorun Ibadan?

1. Beeni 2. Beeko

19b. Ti obaje beeni, nje ele daruko won? _____

SECTION D: ERO NIPA HIV TIPATIPA KI IGBEYAWO TO WAYE

I. IHA SI AYEWO HIV TIPATIPA KI IGBEYAWO TO WAYE

Ilana: Ejowo, efala si idaun bi oba se ye

	GBOLOHUN	Mofaramo	Miofaramo	Miole
20.	Isoro nla ni HIV/AIDS je			
21.	Oyeki awon ile ijosin maaro awon omo ijo won lati lose ayewo HIV.			
22.	Ko nilo latilose ayewo HIV ti okunrin ati obinrin bati pinu lati fera			
23.	Ayewo HIV ni tipatipa ki igbeyawo towaye wa lara ona ti ijo file dabobo awon omo ijo lowo kiko kokoro HIV.			
24.	Gbogbo ile ijosin loye kiwon ma kan nipa fun awon afesona lati koko lose ayewo HIV			
25.	Kikan ayewo HIV nipa fun awon afesona kiise ona ti odara lati fimo boya won ni kokoro HIV			
26.	Koyeki ayewo HIV tiwon pandandan fun awon afesona je ofe			
27.	Koyeki ayewo HIV fun awon afesona je afinufindose			
28.	Kikan ayewo HIV nipa fun awon afesona lee mu kiwon mase igbeyawo won ni ibiti wonti kannipa funwon			
29.	Lilo fun ayewo HIV ki igbeyawo to waye yio mu ki esi ayewo na dimimo ni gbangba			
30.	Awon olori esin si ma nri awon toni kokoro HIV gegebi elese			

19a. Nje emo ibi ti eyan tilese ayewo HIV ni ijoba ibile ariwa-iwoorun Ibadan?

1. Beeni 2. Beeko

19b. Ti obaje beeni, nje ele daruko won? _____

SECTION D: ERO NIPA HIV TIPATIPA KI IGBEYAWO TO WAYE

I. IHA SI AYEWO HIV TIPATIPA KI IGBEYAWO TO WAYE

Ilana: Ejowo, efala si idaun bi oba se ye

	GBOLOHUN	Mofaramo	Miofaramo	Miole pinu
20.	Isoro nla ni HIV/AIDS je			
21.	Oyeki awon ile ijosin maaro awon omo ijo won lati lose ayewo HIV.			
22.	Ko nilo latilose ayewo HIV ti okunrin ati obinrin bati pinu lati fera			
23.	Ayewo HIV ni tipatipa ki igbeyawo towaye wa lara ona ti ijo file dabobo awon omo ijo lowo kiko kokoro HIV.			
24.	Gbogbo ile ijosin loye kiwon ma kan nipa fun awon afesona lati koko lose ayewo HIV			
25.	Kikan ayewo HIV nipa fun awon afesona kiise ona ti odara lati fimo boya won ni kokoro HIV			
26.	Koyeki ayewo HIV tiwon pandandan fun awon afesona je ofe			
27.	Koyeki ayewo HIV fun awon afesona je afinufindose			
28.	Kikan ayewo HIV nipa fun awon afesona lee mu kiwon mase igbeyawo won ni ibiti wonti kannipa funwon			
29.	Lilo fun ayewo HIV ki igbeyawo to waye yio mu ki esi ayewo na dimimo ni gbangba			
30.	Awon olori esin si ma nri awon toni kokoro HIV gegebi elese			

31.	Eniti obati ko kokoro HIV tiko itiju ba ebi re			
32.	Eru ideyesi le muki emi ati afesona mi mase lose ayewo HIV tiwon kan nipa funwa			
33.	Kikan ayewo HIV nipa ki igbeyawo to waye yio mu ki awon odo mase isekuse mo			
34.	Ifi owo ati asiko sofo ni ayewo HIV tipatipa ki igbeyawo to waye			

II: ERO NIPA AYEWO HIV TIPATIPA KI IGBEYAWO TO WAYE

	Gbolohun	Mio faramo	Miofaramo	Mio pinu	le
35.	Ayewo HIV tipatipa ki igbeyawo to waye yio muki titankale kokoro HIV dinku				
36.	Ayewo HIV tipatipa ki igbeyawo to waye yio muki ideyesi tio romo nini HIV o posi				
37.	Ayewo HIV tipatipa ki igbeyawo to waye yio muki isekuse larin awon odo dinku				
38.	Ayewo HIV tipatipa ki igbeyawo to waye je itapasi eto omoniyan				
39.	Wiwogile/kiko lati se igbeyawo fun awon afesona ti ikan ninu woni HIV je itapasi eto omoniyan				

40a. Nibo ni e ro wipe odara ju fun awon afesona lati lose ayewo HIV?

v. Ile iwosan ijoba

vi. Ile iwosan aladani

vii. Awon ibi ti won ti ma nse ayewo eje toje taladani

viii. Iyoku (so nipato) _____

40b. Kini idi fun idahun yin ni ibere? _____

41. Tani ero wipe ohun lo daraju lati so esi ayewo na fun awon afesona ati pe kinidi? Ejowo, enikan pere niki emu

	Dokita	**Oluso agutan/Imamu**	**Baba ti iyawo tabi ti oko**	**Ore**
Idi (Efala si bi obase posi)	Yio se ipamo esi na	Ohun ni adari nipa ti emi	Oni ogbon lati so esi na	Ore sumo awon afesona ju awon iyoku lo
	Ohun lose ayewo na	Yio se ipamo esi na	Yio se ipamo esi na	Ore se finutan
	Yio le se itoju	Yio gbadura funwon	Osumo awon afesona na ju awon yoku lo	koni se ideyesi
	Ojuse reni lati so esi ayewo na	Won je eniti oni abowo fun ju elo miilo	koni se ideyesi	
		Won koni se ideyesi		

Appendix 4

Atoka apero

Eku irole gbogbo eyin olukopa

Emi ni Adefioye Olumide, akeko ni eka to nrisi igbelaruge ilera ti yunifasiti Ibadan. Apero yii ni ati fe se ijiroro lori oro to jemo ayewo HIV tipatipa ki igbeyawo to waye. Afe mo oju tie yin fiwo. Ejowo, ewa ni ominira lati jekamo ero yin nipa oro yii. Awon idahun yin ni ao se ipamo re, nitorina, ao mo riri ki efi otito inu dahun. Afe toro aye lowo yin lati lelo ero to ngbohun sile ki ama ba padanu eyikeyi ninu awon idahun ti eba funwa. Ese.

1. Kini oje edun okan awon apon lori oro HIV/AIDS?
2. Kini emo nipa ayewo HIV tipatipa ki igbeyawo to waye?
   Bere fun awon ijo ti awon olukopa mo ti won ma nkan nipa
   Bere biwon semo wipe awon ijo na ma nkan nipa
3. Kini ero awon apon nipa ayewo HIV tipatipa ki igbeyawo to waye?
   Kini awon anfani towa nibe? Kini awon nkan ti ko se anfani towa nibe?
4. Kilode ti awon ijo elesin fi gbodo kan ayewo HIV nipa kiwon to so awon tiwon fese igbeyawo po?
5. Kini awon apon ro wipe yio sele ti ayewo bari wipe ikan ninu awon afesona ni kokoro HIV?
6. Kini ero yin nipa awon ijo elesin tiwon kiise igbeyawo fun awon afesona ti ikan ninu won bafi leni kokoro HIV?
7. Kini igbese tie o gbe ti afesona bako lati tele yin lose ayewo HIV gegebi ijo yin se liana re?
8. Tani oye ki won fun ni esi ayewo na? Bere fun idi re
   Tani oye ki oso esi ayewo na? Kini idi?
9. Kini oye ki awon ijo elesin se ti ayewo tiwon se bafi han pe ikan ninu awon afesona ni kokoro HIV?

Appendix 5

Stratification of communities in Ibadan Northwest Local Government Area

Inner core areas	Transitory areas	Peripheral areas
Bere	Omitowoju	Ashipa
Alekuso	Ode-Oolo	Askar Paints Road
Oritamerin	Adamasingba	Oluseyi
Ayeye	Akintola	Tobi
Asukuna	Onireke	Adetokun
Oke Are	Ayorinde	Tinuala
Agbede-Adodo	Fajuyi Road	Idi-Ishin
Sapati	Eleyele	Afonta
Opo-Yeosa	Local Government HQs	Tin Can Area
Agbaje	Iya Olobe	Barracks
Agbeni	Salvation	Magazine Road
Ibikunle	Daily Times	Jericho
Idikan	Ekotedo	Benjamin
Ogunpa	Dugbe	NIHORT
Amunigun	Oganla	Police Barracks
Opo		Olopomewa
Oke Seni		Obokun
Oniyanrin		
Alawo		
Inalende		
Elelede		
Atowoda		
Agbokojo		

Abebi		
Ladapo		
Oke Padre		
Ifeleye		
Alasopupa		

Appendix 6

Sample size calculations based on the strata

Inner core communities: 28

Transitory communities: 15

Peripheral communities: 17

Calculation of sample size for each stratum using the ratio 28:15:17

Inner core stratum

28÷60×571= 266

Transitory communities

15÷60×571= 143

Peripheral communities

17÷60×571= 162

Calculation of the number of respondents to be interviewed in selected communities in each stratum using the 7:4:4 ratio

Inner core

266÷7= 38 respondents in each of the 7 communities

Transitory

143÷4= 36 respondents in each of the 4 communities

Periphieral

162÷4= 41 respondents in each of the 4 communities