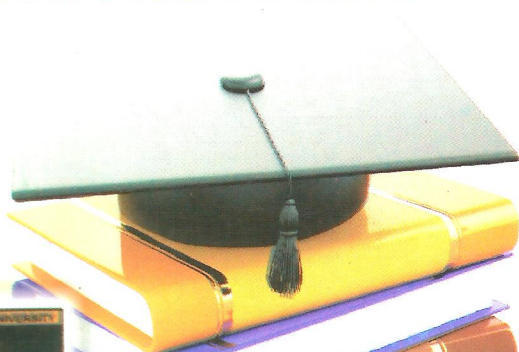


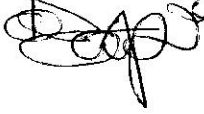
EDUCATION: **A MULTI-DISCIPLINARY APPROACH TO IMPROVING QUALITY OF LIFE**

A book of readings in honour of

**Professor
EMMANUEL ADEREMI AKINADE**



*A Publication of the Faculty of Education,
Lagos State University, Ojo, Lagos.*

Oluyide Adekeye


EDUCATION:

A MULTI-DISCIPLINARY APPROACH
TO IMPROVING QUALITY OF LIFE

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*A Publication of the Faculty of Education,
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Published by:

Faculty of Education
Lagos State University,
Ojo, Lagos State
Nigeria.

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First Published 2013

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ISBN: 978 – 33331 – 2 – 9

Printed in Nigeria by:
Olu-Akin Press, 08033852811

Foreword

Education: A Multi-Disciplinary Approach to Improving Quality of Life is a book of readings in honour of Professor Emmanuel Adereimi Akinade – A Professor of Counselling Psychology.

The book contains well-developed articles that reflect the various ways that quality of life can be improved. Some of the subthemes covered are:

- Educational psychology in the service of the Nigerian educational system.
- Beyond basal readers to new trajectories in reading instruction: implications for guidance and counseling.
- Best counselling practice in controlling child labour in Nigeria.
- Counseling practices in Nigerian universities: need for effective management.
- Students' poor performance in external examinations: challenges for counseling.
- Enhancing quality of life in children through effective early life attachment relationships with parents.
- From teaching to mentoring: Desirabilities of stronger affinities in the classroom for better quality of life.
- Labeling in the school system: an aspect of hidden curriculum for improving quality of life.

It is hoped that the content of this book of Readings will help in improving the quality of life of Nigerians generally and students in particular, as every one needs improved quality of life.

The book is divided into various chapters that have been written by seasoned and experienced scholars.

I warmly invite readers of this book of Readings to enjoy every chapter therein.

I sincerely thank members of the Editorial Board for a job well done.

Prof. R.O Okuneye,
Dean, Faculty of Education.

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Simeon Dosunmu & Ife Abodunrin – From Teaching to Mentoring: Desirabilities of Stronger Affinities in the Classroom for better quality of life

Olujide A. Adekeye – Factors Influencing Attitude of Artisans Towards Human Immunodeficiency Virus Voluntary Counselling and Testing (VCT) Three Communities

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Adetunji Abiola Olaoye & Otun Ismaila Wasiu – Nature, Place and Role of Mathematics Teachers for the 21st Century of Nigerian Economy

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Factors Influencing Attitude of Artisans Towards Human Immunodeficiency Virus Voluntary Counselling and Testing (Vct) in Three Communities

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Abstract

Human immunodeficiency virus and acquired immune-deficiency syndrome (HIV/AIDS) is a global problem and its emergence has introduced new dimensions to health care delivery worldwide. One of these dimensions is voluntary counselling and testing (VCT). Young people between ages 15 and 24 ($n=77$, mean=19 years) are at risk on an unparalleled scale, and they account for more than fifty (50) percent of all HIV infections throughout the world. A survey research questionnaire made up of four trajectories including sexual behaviour scale, attitude towards voluntary counselling and testing scale, attitude towards HIV/AIDS scale and knowledge of HIV/AIDS scale was used in this study. The study made use of frequency counts, percentage and regression analysis. The SPSS software was used to analyze the data. The study indicates a fairly high knowledge level of HIV and the result also shows that there is low uptake of HIV VCT among the participants (34%). More females (65%), married (73%) and older participants (96%) have screened for HIV. Majority of the participants are sexually active (62%). Findings show that sexual behaviour ($\beta = 0.530$; $t = 0.689$; $p > 0.05$) and attitude to HIV ($\beta = 0.691$; $t = 0.834$; $p > 0.05$) of the three predictor variables were not strong predictors of attitude of towards HIV voluntary counselling and testing. Knowledge of HIV was the strongest or most potent predictor of attitude towards HIV voluntary counselling and testing ($\beta = 4.907$; $t = 5.730$; $p < 0.0005$). HIV voluntary counselling and testing (VCT), which is one area of control and prevention of HIV/AIDS is yet to be fully harnessed in Nigeria. Based on these findings, the study shows the need for strong advocacy, enlightenment and community mobilization for improved awareness and utilization of HIV VCT services. Local, community and religious leaders, including youth leaders should be incorporated into the drive to increase awareness and knowledge of HIV/AIDS

Keywords: HIV VCT, HIV knowledge and attitude, sexual behaviour, artisans, HIV sites

Introduction

HIV voluntary counselling and testing (HIV VCT) is recognized as a key gateway to accessing prevention and care services and also has been shown to reduce risk behaviours (USAID et al, 2004). However, uptake of testing and counselling remains low around the world (WHO/UNAIDS/UNICEF, 2009; UNAIDS/WHO, 2009). In many countries, tremendous improvement has been observed in the last decade concerning access to HIV VCT services. However, access to such services has been low among the most at-risk groups (WHO/UNAIDS/UNICEF, 2009). A WHO (2003) report states that HIV VCT plays a role in both prevention and care for people with HIV infection as an entry point to care and support. HIV Voluntary counselling and testing is the process by which an individual undergoes counselling enabling him or her to make an informed decision/choice about being tested for HIV. This decision must be entirely the choice of the individual and he/she must be assured that the process will be confidential (Kalichman & Simbayi, 2003 and UNICEF, UNAIDS & WHO 2002).

HIV counselling and testing is not widely available, nor widely promoted. However, some research studies suggest that access to voluntary counselling and testing services is poor and research also suggests that in many cases counselling services are less than adequate (Adekeye, 2010; Illiyasu *et al.*, 2006; Ekanem & Gbadegesin, 2004). Zhou, Guo, Fan, Tian, & Zhou (2009) notes that in order to enhance the effective delivery of VCT services in a country, an accurate assessment of the current status is very important. A study by Weiser, Heisler, Leiter, Percy-de Korte, Tlou, Demonner *et al.*, (2006), in Botswana among people, who were never tested for HIV, showed that the major reason for not testing was fear of a positive HIV test result. Bwanali, Jereni, Muula (2008) surveyed clients of VCT in Malawi to assess their motivations for HIV testing. They found that obtaining knowledge about HIV recently was the main motivation for seeking VCT. The same result was found by Sherr *et al.*, (2007).

About half of the 34 million people in the world who are infected with HIV were infected between the ages of 15 and 24 (UNAIDS, 2011; WHO, 2007). Persons in this category are adolescents and those in early adulthood. While this assertion certainly seems to paint a gloomy picture of the future, there is hope in this frightening statistic: the power to confront this virus head-on is in the hands of the world's most productive members, the youths. Studies (WHO, UNAIDS & UNICEF, 2007) have shown that the virus affects young adults, and according to Lloyd (2004), especially those in their most productive and reproductive years. From 1987, the international community rose up to the challenges of HIV and AIDS. In May 1987, the 40th World Health Assembly unanimously endorsed the WHO global strategy for AIDS prevention and control. In the same vein, Heads of States or Government and representatives of the European community also endorsed the fight against AIDS at the Venice Summit in June 1987. In the fourth

quarter of the same year (October 1987), AIDS became the first disease ever discussed on the floor of the United Nations (WHO/GPA, 1988b). A formal resolution of the 42nd Session of the UN General Assembly directed mobilization of the entire United Nations system and confirmed W.H.O's role in the direction and coordination of global efforts to combat AIDS.

About 3.5 million Nigerians are living with HIV, ranking Nigeria third among the countries with the highest HIV/AIDS burden in the world after India and South Africa (Adekeye, 2010; NACA, 2012). Adolescents and young adults (19-24 years) constitute the majority. In the National Demography and Health Survey (NDHS, 2003), the national prevalence, which stood at 1.8% in 1991 increased due to the absence of a concerted effort to confront the virus head-on to 5.8% in 2001, it fell to 5.0% in 2003, and it dropped slightly again to 4.4% in 2005. There was another upsurge in 2008 (4.6%) but fell to 4.1% in 2010 (NACA, 2012; Yahaya, 2007). HIV/AIDS prevalence rates are highest for young people between the ages of 19 and 24 compared to other age groups. Nigeria's STD/HIV Control estimates that over 60% of new HIV infections are in the 15-25 years category.

As used in this study, the terms young people, youths and adolescents are used synonymously to refer to persons between 13 and 25 years which constitute the age group under consideration in this study. The adolescence period is a time of enormous physiological and behavioural change and expectations. In a general sense, adolescence as a developmental stage has been regarded as a gap between childhood and adulthood or as a prelude to and preparation for adulthood. Experimentation, risk taking and sexual exploration within the context of feelings of invulnerability characterize this period (Adekeye, 2005). One major task of this period is trying to be 'oneself', which often leads the adolescent to making choices and commitments. UNFPA (2004) posits that adolescence and young adulthood is a time of all-encompassing transition physically, mentally and socially. It is a time of experimentation and new experiences, and a time when young people make choices that have a profound bearing on the future course of their lives. Young people in Nigeria are experiencing these characteristic ups and downs of the passage to adulthood.

Young people and HIV/AIDS prevention and care have been accorded priority in global goals for young people and HIV/AIDS. The United Nations General Assembly Special Session on HIV/AIDS (UNGASS) and other international commitments (for example the Dublin Declaration) call for accelerated action at the national level, especially for a health system response through the provision of youth friendly health services to contribute to the fight against HIV/AIDS. UNAIDS (2006) notes that what works is the provision of information and counselling, particularly directed to skills and knowledge acquisition, condoms, sexually transmitted infection treatment and care, harm reduction measures for injecting drug users and access to HIV testing, care and support are effective in reducing HIV transmission and meeting the sexual health needs of young people in a variety of settings (students, artisans, traders, sex hawkers, military and

paramilitary personnel, itinerant workers and many others). Young people have a right to health services to ensure universal and equitable access to services for prevention, treatment and care regardless of age, gender, sexual orientation or socio-economic status. Grubman and Oleske (1996) note that in sub-Saharan Africa, 75% of all new cases of HIV infection occur in individuals below 20 years of age. They compare this with data from the United States and report that relatively in the US, an analysis of the age of acquisition of HIV fell from over 30 years in 1980 to 25 years during the period between 1987 and 1991 and that during that time, 25% of newly infected people were under the age of 22 years. Papalia, Olds & Feldman (2001), Rwege (2000) and Toroitich-Ruto (2000) all agree that the rate of adolescent sexual behaviour, especially risky sexual behaviour, is a public health concern.

HIV prevalence among young people has increased steadily especially in the poorer nations and prevention strategies aimed at this group must be anchored on evidence of the proximate and background risk factors that increase the vulnerability of young people. Adolescents' sexual behaviour is of public health importance since young people often lack adequate knowledge and skills of how to protect themselves from unplanned pregnancies and sexually transmitted infections (Madise, Zulu and Ciera, 2007). Teens and young adults face many pressures and decisions involving alcohol, drugs, and sexual activity decisions that often occur simultaneously. Research has shown that many health risk behaviours occur in combination with one another, yet it is often unclear which behaviour comes first (Eisen, Pallitto, Bradnre and Bolshun, 2000).

This study focuses on young people (13-25 years) because they have implications for the direction of the epidemic. Young people are the most affected and the most vulnerable due to the features of the age bracket under consideration. If young people could be effectively helped, then the prevalence and incidence of HIV would drastically reduce. Also, the target populations are the future leaders and trustees of posterity, they are also malleable. Because they are impressionable, they are expected to have a behavioural and attitudinal change through a planned process of counselling and HIV voluntary testing. In a study by Tadele (2000), it was reported that HIV/AIDS was of relatively low concern to the street youths due to their preoccupation with survival in an adverse environment. It was also reported that levels of HIV/AIDS knowledge were low and common misconceptions about the nature, risk, transmission, and prevention of HIV indicated a lack of access to information. HIV Voluntary counselling and testing (VCT) services are designed to reduce the rates of HIV transmission through a reduction in high-risk sexual behaviour and through improved access to medical treatment, care, and support. However, increasing access to and uptake of VCT, especially among groups at high risk for HIV infection, has remained a major challenge in Nigeria and in most African nations.

Counselling young people about HIV testing is quite challenging. It is important to be non-judgmental, to establish rapport, and to instil hope in young

people, particularly those testing positive. Young people who are HIV positive still have their dreams and many years ahead and the question is what happens to their dreams? How long can they sustain behaviour change? UNAIDS (2006) concludes that they should be helped to cope. In many places, a culture of silence surrounds HIV/AIDS. Often, this silence is caused by a religious association between HIV/AIDS and 'immorality' in the form of certain sexual behaviours, sexual orientation and drug and alcohol abuse.

There are major barriers to the successful implementation of HIV testing and counselling strategies and some of these barriers as highlighted by experts are: 1) patients' recognition of their risk of HIV, 2) access to testing, 3) acceptance of testing, 4) receipt of results, and 5) entry into preventive and treatment services. A major reason for not undergoing HIV testing is that persons at risk may not perceive themselves to be at high risk for acquiring infection, and thus do not seek to be tested (CDC, 2003; Nyamathi, Stein and Swanson, 2000).

According to the Global Health-Sector Strategy for HIV/AIDS 2003–2007,

People have a right to know their HIV status, and testing and counselling should be widely accessible through innovative, ethical and practical models of delivery. HIV testing and counselling are entry points to HIV-related care and prevention services, and provide opportunities for people to reduce their risk of acquiring or transmitting HIV. High priority should be given to scaling-up HIV testing and counselling to maximize the opportunities to reach those with HIV infection or at high risk.

Figure 1: Report of Global HIV/AIDS (Nigeria)

162,265,000: Population of Nigeria (NACA est.)
3,500,000: Estimated number of people living with HIV/AIDS by the end of 2010
4.1%: Estimated percentage of adults (ages 15-49) living with HIV/AIDS by the end of 2010
4.2%: HIV prevalence among young people (ages 15-24) by the end of 2010
3%: HIV prevalence among young women (ages 15-19)
4.6%: HIV prevalence among young women (ages 20-24)
360,000: Estimated number of children (ages 0-15) living with HIV/AIDS by the end of 2009
217,000: Estimated number of deaths due to AIDS during 2010

Source: NACA, 2012; World Bank (2010); UNAIDS 2011 Report on the Global AIDS Epidemic.

Young people are perhaps the most important group in a given society and going by their features and population; they are a country's most valuable future assets (UNFPA, 2003). A study shows that adolescents occupy an exciting, but

potentially dangerous position (Okhiade, 2003). Young people, like adults, contract HIV primarily through injecting drugs; through unprotected heterosexual activity and through unprotected sexual activity between men (MSM) (UNAIDS, 2006). HIV can also be transmitted via blood transfusions, through the sharing of non-sterile equipment that breaks the skin (UNICEF, 2005), and from a woman to her baby during pregnancy, birth or breastfeeding (WHO, 2006). Due to their vulnerability, young people encounter numerous psychological, social and economic obstacles, and because of the inability of government, parents and other significant persons to monitor this unique group, some resort to prostitution, armed robbery, thuggery, bullying and engaging in careless and risky sexual behaviours.

These problems among others show that there is an exponential rise in youths risk behaviours which may aid the spread of HIV. As a result, there is an urgent need to study the attitude of artisans towards HIV Voluntary Counselling and Testing (HIV VCT), not in isolation but by considering how knowledge of HIV, attitude towards HIV and sexual behavioural disposition could predict their attitude towards HIV VCT. According to Human Development Report (2004), VCT is the process that enables an individual to undergo a change in behaviour in order to make an informed choice about being tested for HIV. HIV testing and counselling have been shown to promote risk reduction behaviours (UNAIDS, 2006; UNAIDS/WHO, 2006 & UNICEF, 2006) and most studies involving couples in Africa show that knowledge of HIV test results promotes behaviour change and reduces transmission (Allen, Karita, N'gandu, and Tichacek, 1999).

Methods

Research Design

This study employed descriptive survey method. According to McQueen & Knussen (2006), the survey method helps to collect data from large numbers of participants on a particular topic and may involve self-report questionnaires or highly structured interviews. Leedy & Ormrod (2001) describe the survey method of research as the research that simply looks with intense accuracy at the phenomenon of the moment and describes precisely what the researcher sees, making a careful record of what is observed so that he can analyze the meaning of the information obtained. This method was adopted because of its flexibility and effectiveness in information gathering.

Sample and Sampling Procedure

A total of 77 respondents were involved in this study. A stratified random sampling was employed in selecting the respondents to cater for demographic variables such as gender, age and type of vocation.

Study Area and Inclusion Criteria

The study was conducted in Sango, Ota and Atan communities. Inclusion criteria: For this study, we included artisans who are between 13 and 25 years of age and who reside and have their workshop, market stalls or operate "okada" within these three communities. Part of the inclusion of participants in the study

was the willingness of the individual to sign a consent form in English or Yoruba language. Thump-print with two independent witnesses and verbal consent was accepted as consent for individuals who cannot read. Exclusion criteria: Individuals who are under the influence of drugs were not accepted in the study. This was established through a cognitive testing to ascertain their understanding of first three questions of the consent form i.e. a form of mental status examination. The questions are: where do you live? Type of work, vocation or apprenticeship do you belong to or do and their marital status?

Instruments

The instrument used for data collection was a 35-item questionnaire titled "Questionnaire on Knowledge, Attitude, Practices and HIVVCT". The questionnaire was divided into four sections. Section A was based on demographic data with includes age, sex, marital status, number of children and education qualification. Two questions were added to this section seeking to establish whether the participants are sexually active or not, and to determine whether they have screened for HIV or not. Section B was based on HIV Knowledge, Attitude towards HIV and HIV Prevention. Section C was designed to elicit information on the sexual behaviours of the participants. Section D elicited information on attitudes towards HIV voluntary counselling and testing (HIVVCT). The sections were structured as a Likert-type rating scale.

Psychometric Features

The sexual behaviour scale was adapted from the sexual behavioural change scale by Uwalaka and Matsuo (2002). The validity of this scale has been established in several studies. They reported a Cronbach's alpha of 0.73. The knowledge, attitude and the HIVVCT scale was self designed with a Cronbach alpha of 0.71. The reliability estimate of the scales obtained from a test-retest coefficient ranges from 0.77 to 0.81 for the three scales making up the questionnaire. This was sufficient for the conduct of the study. The questionnaire was certified by peer researchers to have content validity. For the construct validity, the study has a convergent validity (.75 to .86) with the KABP (Ingham & Stone, 2006).

Procedure for Data Collection/Analysis

The questionnaire forms were administered to the respondents with the aid of trained research assistants who doubled as interpreters where necessary. They helped to interpret to those who could not speak and/or understood English. The questionnaires were collected on the spot. This ensured 100% response rate. Data was collected from August through to early October 2012. The data were expressed as both descriptive and inferential statistical methods, such as frequency counts and percentages and regression analysis and a P-value of ≤ 0.05 was considered as significant. All statistical analyses were performed using SPSS (SPSS version 17 for Windows, SPSS Inc., Chicago, IL).

Ethical Considerations

Prior to administering the questionnaire, the purpose of the study was explained to the participants. Participation was voluntary and there was no incentive given for participation. Those who agreed to participate were made to sign while others opted for oral acceptance. Anonymity was assured by asking participant not to write their names on the questionnaire forms. Seventy-seven (77) artisans participated in this study.

Research Questions

1. What is the HIV knowledge level, sexual behaviours and attitude of the participants towards HIV?
2. What is the attitude of the participants towards HIVVCT?

Research Hypothesis

1. There will be a significant relative and combined contribution of HIV knowledge, attitude to HIV and sexual behavioural dispositions in the prediction of attitude of artisans towards HIV voluntary counselling and testing.

Results

Table 1: Cross Tabulations of the Socio-Demographic Factors and Ever Tested for HIV/AIDS

Socio Demographic Variables	Ever Tested for HIV
	N = 26
SEX	
Male	9 (34.6%)
Female	17 (65.4%)
Age	
13-18 years	1 (3.8%)
19-25 years	25 (96.2%)
Marital status	
Single	6 (23.1%)
Married	19 (73.1%)
Cohabiting	1 (3.8%)

It is obvious from Table 1 that more females have tested for HIV (65.4%) than males (34.6%). The data further revealed that young people between ages 19 to 25 have presented for HIV VCT (96.2%). More married (73%) participants have screened for HIV while 6 (23.1%) singles and 1 (3.8%) cohabitating participant have screened for HIV respectively.

Table 2: Socio- Demographic Characteristics of Participants

Characteristics n = 77	
Age Group Sexually Active (Regular sex in last two months)	
13-18 years	31 (40.3) Yes 48 (62.3)
19-25 years	46 (59.7) No 29 (37.7)

Gender I am aware of HIVVCT
Male 50 (64.9) Yes 47 (61.0)
Female 27 (35.1) No 30 (39.0)
Marital Status Where is it Provided
Single 47 (61.0) Govt Hospital 55 (71.4)
Married 21 (27.3) Private Hospitals 39 (51.0)
Cohabiting 9 (11.7) Pharmacy Shops 48 (62.3)
Health Centres 17 (22.0)
Level of Educ.
No Education 9 (11.7)
Primary/JSCE 57 (74.0) Ever tested for HIV
SSCE 11 (14.3) Yes 26 (33.8)
No 51 (66.2)
Religion
Christianity 24 (31.2)
Islam 43 (55.8)
ATR 6 (7.8)
Others 4 (5.2)

More males (65%) than females (35%) participated in this study. Participants between 19 and 25 years accounted for 46 (59.7%) of the sample while those between 13 and 18 years made up the remaining 31 (40.3%) of the sample. Sixty-one percent (61%) of the participants are single, 27.3 percent are married, while the remaining 9 (11.7%) are cohabitating. Nine (11.7%) of the participants did not complete primary education while the majority (74%) completed primary school and/or junior school. Eleven participants (14.3%) completed secondary education. More than half of the participants belong to the Islamic faith (55.8%), 31.2 percent belong to the Christian faith. Majority of the participants have not tested for HIV; 51 (66.2%) of the participants have not presented for HIV screening while 26 (33.8%) have tested for HIV. 47 percent indicated they are aware of VCT services while 30 participants (39%) deferred. Participants have knowledge of HIV VCT centres in their communities, 71 and 51 percent of participants are aware that government and private hospitals provide HIV VCT services respectively. However, 52 and 22 percent of the participants indicated pharmacy shops and community health centres respectively.

Research Question 1: What is the HIV knowledge level, sexual behaviours and attitude of the participants towards HIV?

Table 3: HIV knowledge, Attitude and Sexual Behaviours

Knowledge of HIV/AIDS n = 77	Freq (%)
I am aware of HIV/AIDS	68 (88)
HIV/AIDS is a contagious disease	48 (62)
HIV/AIDS is presently incurable	50 (65)
People with HIV/AIDS look sick	64 (83)

HIV causes AIDS	44 (57)
Modes of Transmitting HIV/AIDS: HIV/AIDS is transmitted through Insect bite Sexual intercourse without condom	
Sharing of needles among drug users	46 (60)
Blood from an HIV infected person	62 (81)
Mother to child transmission	28 (37)
	39 (50)
	22 (28)
HIV/AIDS Prevention	
Being faithful to one's partner	54 (70)
Abstaining from sex	39 (51)
Using condom during sex	52 (67)
Avoiding sex with prostitutes	61 (79)
Avoid sharing sharp objects like needles and blades	43 (56)
Attitude towards HIV/AIDS	
HIV/AIDS infected persons should be allowed to remain in the society.	40 (52)
HIV/AIDS is not a big problem as people think it is	52 (67)
I would not like to have an HIV positive person near me.	32 (41)
Youths should be taught how to avoid HIV/AIDS during sexual encounters	58 (75)
HIV/AIDS affects only the sexually wayward	62 (81)
Sexual Behaviour/Practices	
Sexual intercourse with my partner only	40 (52)
Keeping multiple sexual partners	49 (64)
I have practiced anal sex with my partner	14 (18)
I had sex without using condoms	60 (78)
I always use condom during sex	16 (21)

Table 3 shows the general knowledge of HIV/AIDS measured on three levels such as knowledge, routes of transmission, and the prevention of HIV/AIDS. Data indicate a fairly high knowledge level of HIV (I am aware of HIV/AIDS 88% and HIV is presently incurable 65%). Eighty-one percent (81%) of the respondents correctly identified sexual intercourse without condoms as one of the main routes of transmitting HIV; also identified was blood from an HIV infected person (50%), while the response to HIV prevention shows that young people have the capacity to stay away from HIV infection. Sixty-seven percent (67%) correctly identified using condom during sex to prevent HIV while 70% and 51% identified being faithful to ones partner and abstaining from sex to prevent HIV respectively. However, the participants showed low knowledge of two vital routes of HIV transmission. Only 37 and 28 percent indicated that sharing of

needles among drug users and mother to child transmission are routes of HIV transmission respectively.

There was a mix of positive and negative attitudes towards HIV/AIDS among the participants. A third (75%) indicated that youths should be taught how to avoid HIV/AIDS during sexual encounters and 40 (52%) agreed that people living with HIV should be allowed to remain in the society. There was a general misconception among the participants as 81% indicated that HIV/AIDS affects only the sexually wayward. In the same vein, 67% reported that HIV/AIDS is not a big problem as people think it is. As indicated in Table 3, fifty two percent have sexual intercourse with their partners only, however, 64% had engaged in sexual intercourse with multiple partners. 18% had engaged in anal sexual activity in the last two months while 60 (78%) claimed they had sexual intercourse without using condoms as compared with 16 (21%) that had sexual intercourse with the use of condoms in the last two months.

Research Question 2: Attitude of the Participants (such as auto mechanic, tailoring and hairdressing apprentice, shop girls, kiosk owners, and 'okada' riders) towards HIV VCT

Table 4: Attitude towards HIV Voluntary Counselling and Testing

Attitude towards HIVVCT	Freq (%)
I will like to know my HIV status	
Because it is free of charge	59 (77)
Knowing my HIV status will be beneficial to me and others	45 (58)
Due to the availability of VCT services	38 (49)
Because test result will be kept secret (confidential)	42 (54)
Knowing my HIV status is just necessary	46 (60)
I will prefer not to know my status because	
I do not engage in sexually risky behaviours	32 (41)
It will affect my family if I turn out HIV positive	45 (58)
Worried that my name would be reported to the government if I test positive	39 (51)
Fear of imminent death if HIV positive	49 (63)
Did not know where to get tested	53 (69)

Responses from Table 4 reveal that participants have a mix reaction of positive and negative attitudes towards HIV Voluntary and Confidential Counselling and Testing. More than half of the respondents reported they will like to know their HIV status because test is free of charge (59 or 77%), while 58% indicated that their HIV status will be beneficial to them and others. Fifty-three percent (53 or 69%) indicated that they did not know where to get tested for HIV/AIDS while 42 or 54% reported they will test because of the confidentiality of test result, and 41% of the respondents did not want to test because they do not engage in sexually risky behaviours. Sixty percent (46) indicated that knowing my HIV status is just necessary while 49 (63%)

participants indicated they will not undergo HIV VCT due to the fear of imminent death if HIV positive.

Hypothesis Testing: Multiple Regression was used to analyse the relative and combined contribution of three predictor variables i.e. knowledge of HIV, attitude towards HIV and sexual behavioural dispositions on the criterion variable i.e. attitude towards HIV voluntary counselling and testing.

Table 5a: Relative Contribution of the Predictors on the Criterion Variable

Predictor Variables	B	Std Err	Beta	t-ratio	Sig.
(Constant)	40.439	1.835	-	22.035	.000
Sexual Behaviour	-.530	.769	-.067	.689	.493
Attitude to HIV	.691	.828	.082	.834	.407
Knowledge of HIV	-4.907	.856	-.554	5.730	.000

Dependent Variable: HIV VCT

Table 5a reveals that sexual behaviour ($\beta = 0.530$; $t = 0.689$; $p > 0.05$) and attitude to HIV ($\beta = 0.691$; $t = 0.834$; $p > 0.05$) of the three predictor variables were not strong predictors of attitude of artisans towards HIV voluntary counselling and testing. Knowledge of HIV was the strongest or most potent predictor of attitude towards HIV voluntary counselling and testing ($\beta = 4.907$; $t = 5.730$; $p < 0.005$). The first part of the hypothesis which states that there is a significant relative contribution of attitude to and knowledge of HIV and sexual behavioural dispositions in the prediction of attitude towards HIV voluntary counselling and testing was accepted for knowledge of HIV but rejected for sexual behavioural dispositions and attitude towards HIV.

Table 5b: Combined Contribution of the Predictors on the Criterion Variable and Model Summary of Multiple Regressions^b

R= .569 ^a					
R ² = .324					
R ² Adj= .296					
Std Err= 3.2249					
Source	SS	df	MS	F	Sig.
Regression	364.047	3	121.349	11.669	.000
Residual	759.173	73	10.400		
Total	1123.220	76			

a. Predictors: (Constant), Knowledge, Sexual Behaviour, Attitude towards HIV

b. Dependent Variable: HIV VCT

Table 5b reveals that when all the predictor variables were entered into the regression model at once, there was a significant combined contribution ($r = .569$, $r^2 = .324$; $F_{(3, 73)} = 11.669$; $p < 0.005$). In this study, 32.4 percent of the variation in attitude towards HIVVCT appears to be accounted for by the combination of knowledge of HIV, sexual behavioural dispositions and attitude

towards HIV. The second part of the hypothesis which states that there will be a combined contribution of the predictor variables was accepted.

Discussion

This study explored knowledge of HIV/AIDS, attitude to HIV and voluntary counselling and testing (HIV VCT), sexual behavioural dispositions and uptake of HIV VCT among young persons of whom the majority were 25 years or less, single and had at least primary school or Junior secondary school education. This target group has been reported to carry a huge share of the HIV/AIDS burden as well as constituting the centre of HIV/AIDS epidemic (UNAIDS 2008; Monasch & Mahy, 2006).

HIV VCT is beneficial as a first step in prevention and care but as observed in this study and in concert with the findings of Adekeye (2010) and WHO (1998), despite the proven benefits of VCT, acceptability is low. Findings reveal that uptake of HIV VCT is low (26 or 34%) among artisans in the three communities. In this study, more females (65.4%), older participants (96.2%) and married (73.1%) have screened for HIV. Fifty-four percent (54%) of the youth in a study by Peralta, Deeds, Hipszer and Ghalib (2007) felt that they were at low risk for HIV. Meiberg, Arjan, Hans and Herman (2008) in their study reported that participants had different levels of knowledge about HIV/AIDS and VCT, and that AIDS was still strongly associated with 'death'. In Peralta's study, the most common reason (63%) given by the youth for not testing for HIV was that they had never been offered an HIV test, whereas in the current study, 69% reported that their inability to locate a testing centre prevented them from undergoing HIV test. Only 26 (34%) of the participants in this study had ever taken HIV screening test. Kiragu (2001) also reported that more than 90 % of the respondents had heard about VCT. While about 45% reported that there was a VCT center nearby, however, only 10 % had ever gone for a VCT. Survey results have shown that the desire by Nigerians to go for HIV testing increased from 43% in 2005 to 72% in 2007 (NARHS, 2007) but the reality in several studies shows the uptake of HIV VCT is low among the general population (Adekeye, 2010; Huchko, Bukusi, Montandon, Nguti and Cohen, 2007; Kiragu, 2001; NARHS, 2007).

In this study, participants displayed good knowledge of HIV, 88% were aware of HIV/AIDS and more than half (57%) knew that HIV causes AIDS. However, there was a poor knowledge of mother-to-child-transmission. Only 28 percent identified MTCT as a mode of HIV transmission. In a study by Iliyasu, Kabir, Galadanci, Abubakar and Aliyu (2005) in Kano State, all respondents were aware of HIV/AIDS. 57% had good knowledge, 32% had fair knowledge and the remaining 11% had poor knowledge of the infection. Even though awareness of HIV/AIDS is high (93%), comprehensive knowledge of HIV is low at 25% (NARHS, 2007). Several studies (Adegoke, 2004; Isiugo-Abanihe, 1994; World Youth Report, 2003 & Fakeye & Fakeye, 1989) have reported a high level of HIV knowledge among adolescents and other populations; however, risky

sexual activities and attitudes did not reflect the high level of awareness as there is evidence of increased sexual activity. Though general knowledge about AIDS acquisition and transmission has increased, there is no apparent attitudinal change (Adekeye, 2010; Adekeye & Adeusi, 2011).

The hypothesis that sought to find out whether there was a combined and relative contribution of the predictor variables revealed that sexual behaviour and attitude towards HIV/AIDS were excluded from the stepwise regression model. Knowledge of HIV was the only variable included. When the three predictor variables were entered into the regression model at once, there was a significant combined contribution ($r = .569$, $r^2 = .324$; $F_{(3, 73)} = 11.669$; $p < 0.005$). Relatively, knowledge of HIV was the strongest predictor of attitude towards HIV voluntary counselling and testing ($\beta = 4.907$; $t = 5.730$; $p < 0.0005$). According to Oster (2006), despite the high rate of HIV in Africa, there has been little widespread change in sexual behaviour in response to the epidemic. Stoneburner & Low Bees, (2004) & Williams, Taljaard, Campbell, Gouws, Ndhlovu, Van Dam *et al.*, (2003) all noted that changes in sexual behaviour in Africa seem to have been extremely limited. There is also, according to Thornton (2006) little behaviour change even in response to finding out one's own HIV status.

Papalia, Olds & Feldman (2001); Rwenge (2000) & Toroitich-Ruto (2000) all agreed that the rate of adolescent sexual behaviour especially risky sexual behaviour is fast becoming a public health concern. International surveys of young people's sexual behaviour consistently find that sexual partners are a key influence on the particular sexual practices in which young people decide to engage (Marston & King, 2006). HIV VCT taken independently is unlikely to, and cannot re-arrange human sexual behaviour. The relationship between HIV VCT and sexual behaviour change is not a linear one and sexual behavioural change is therefore an unrealistic outcome measure. Solomon, Van Rooyen, Griesel, Gray, Stein, and Nott (2004) rightly affirm that any research that proves that such a direct relationship exists may be dubious. On the other hand, research that proves that such a relationship does not exist cannot conclude that VCT is a waste of time or resources since the prevention effect of VCT, in combination with other interventions and under certain conditions, may be substantial.

Conclusion

HIV voluntary counselling and testing (VCT) allows individuals to determine their HIV status and serve as a gateway for both HIV prevention and early access to treatment, care and support. Globally, the statistical evidence on HIV testing is growing, thanks both to national surveys and surveys among particular populations, but coverage in Nigeria is still low, especially in many high-prevalence states and among at-most-risk population. While much effort has been made towards improving knowledge about HIV/AIDS among young

people, the same thing cannot be said for the identification of the multidimensional factors that promote a favourable disposition towards or willingness to testing for HIV infection or to undergoing actual testing. With young people at the centre of the epidemic, it was important to understand the extent to which they are willing to test for HIV infection, and the factors associated with such willingness. Young people in Nigeria have a clear understanding and knowledge about HIV/AIDS, how the virus is transmitted and what can be done to prevent the spread of the virus. From the study findings, there is no doubt that several respondents knew the basic ways of preventing and controlling the spread of HIV/AIDS. The issue is therefore not entirely about the lack of knowledge on how to prevent HIV infection, but rather attitudinal change. Attitudes towards HIV VCT reveal that young people have a mix of positive and negative attitudes towards HIV voluntary and confidential counselling and testing (HIV VCT). More than half of the respondents reported that knowing their HIV status was just necessary. More males and young people between ages 15 and 19 years displayed positive attitude towards HIV and People Living with HIV/AIDS (PLHA). The result shows that there is low uptake of HIV VCT by young people in Nigeria. Hopefully, the attitudinal change towards HIV/VCT will no doubt improve the quality of life of young people. It is obvious from the analysis presented that there has been a mixed interest in HIV voluntary counselling and testing by young people in Africa. Countries like Uganda, Kenya and Botswana report a steady increase in uptake of HIV VCT while studies from Nigeria report a low uptake of HIV VCT. The number of respondents that had ever tested for HIV in this study was disproportionately low at 34%.

Based on these findings, there is need for strong advocacy, enlightenment and community mobilization for improved awareness and utilization of HIV VCT services especially in rural and semi-urban areas and among most at risk groups/population (MARPS). Local and community leaders, including youth leaders could be incorporated into the drive to increase on the one hand, awareness of HIV/AIDS and on the other, the imperatives of undergoing HIV test. These leaders understand the idiosyncrasy of their people and could help to develop a locally appropriate communication model for increased uptake of HIV voluntary counselling and testing in their communities.

References

- Adegoke, A. A. (2004). Adolescence and adolescent problems in schools. In Adeyemi Idowu, *Guidance and Counselling in Education*. Ilorin: Indemac Publishers (Nig.) Ltd.
- Adekeye, O. A. & Adeusi, S. O. (2011). Attribution Patterns, Attitude and Knowledge of HIV/AIDS on Sexual Behavioural Change among Students of Covenant University, Ota, Nigeria. *IFE PsychoGia*, 19 (1): 255-269.

- Adekeye, O. A. (2010). *Psycho-Cultural Variables as Predictors of Attitude of Young People Towards HIV Voluntary Counselling and Testing in South Western Nigeria*. Germany: VDM Verlag Publishers.
- Adekeye, O. A. (2005). Adolescents and the HIV pandemic. *Ilorin Researcher: Journal of the Postgraduate Students Association, University of Ilorin*. 3 (1): 23-28.
- Allen, S. A.; Karita, E.; N'gandu, N. and Tichacek, A. (1999). The evolution of voluntary testing and counselling as an HIV prevention strategy. In Gibney J, Climente, R. & Vermund, S. H., *Preventing HIV in developing countries: Biomedical and behavioural approaches*. New York: Kluwer Academic / Plenum Publishers. Retrieved from <http://www.ponline.org/docs/1375/157644.html>
- Bwanali, H., Jereni, A., and Muula, S. (2008). Availability of supplies and motivations for accessing voluntary HIV counselling and testing services in Blantyre, Malawi. *BMC Health Service Resource*, 8: 17. Retrieved from www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2254383
- Centers for Disease Control and Prevention (2003). Advancing HIV prevention: new strategies for a changing epidemic—United States, Morbidity and Mortality Weekly Report; 52:329–32. Retrieved from www.cdc.gov/mmwr/Preview/mmwrhtml/mm5247a2.htm
- Ekanem, E. E. and Gbadegesin, A. (2004). Voluntary Counselling and Testing (VCT) for Human Immunodeficiency Virus: A Study on acceptability by Nigerian women attending antenatal clinics. *African Journal of Reproductive Health*. 8 (2): 91-100. Retrieved from <http://www.jstor.org/journals/wharc.html>
- Eisen, M.; Pallitto, C.; Bradnre, C. and Bolshun, N. (2000). *Teen Risk-Taking: Promising Prevention Programs and Approaches*, Washington DC: Urban Institute. Retrieved from http://www.urban.org/UploadedPDF/TeenRiskTaking_2.pdf
- Fakeye, O.O and Fakeye, T.I. (1989). AIDS in Africa: A survey of knowledge, attitudes and beliefs among students in Nigerian Universities. *Nigeria Medical Practice*, 17 (4), 62-66
- Grubman, S. & Oleske, J. (1996). HIV infection in infants, children and adolescents. In Wormser, G. P. (Ed.). *A clinical guide to AIDS and HIV*. New York: Lippin-Cott Raven Publishers
- Huchko, M.; Bukusi, E.; Montandon M.; Nguti R & Cohen C.R. (2007). Voluntary Counselling and Testing (VCT) uptake, knowledge of HIV status, and risk behaviours in the era of HAART: a random population-based survey in Kisumu, Kenya. *Poster discussion: 4th IAS Conference on HIV Pathogenesis, Treatment and Prevention: Abstract no. TUPDB1*. Retrieved from <http://www.ias2007.org/PAG/PSession.aspx?s=74>
- Human Development Report (Nigeria 2004). *HIV and AIDS: A challenge to Sustainable Human Development*. U.N.D.P.

Global Health-Sector Strategy for HIV/AIDS 2003–2007. Providing a Framework for Partnership and Action. Geneva, World Health Organization, 2003 (unpublished document HIV/2002.25). Retrieved from <http://unaids.org>

Ilyasu, Z., Kabir, M. & Galadanci, H.S. et al. (2006). Postpartum beliefs and practices in Danbare village, northern Nigeria. *Journal of Obstetrics and Gynaecology*. 26:211-215. Retrieved from www.find-health-articles.com/rec_pub_16698627

Ilyasu, Z., Kabir, M., Galadanci, H.S, Abubakar, I.S, Aliyu, M.H. (2005). Awareness and attitude of antenatal clients towards HIV voluntary counselling and testing in Aminu Kano Teaching Hospital, Kano, Nigeria. *Nigerian Journal of Medicine*. 14 (1): 27–32. Retrieved from www.nmanet.org/images/uploads/Journal/OC1917.pdf

Isiugo-Abanihe, U. C. (1994). 'The Correlates of premarital sexuality in Nigerian.' *African Journal for the Psychological Study of Social Issues*, 1(2):257-276. Retrieved from www.popline.org/docs/1334/148387.html

Kalichman, S. C., and Simbayi, L. C. (2003). HIV testing attitudes, AIDS stigma, and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sexually Transmitted Infections*. 79:442-447. Retrieved from <http://sti.bmj.com/cgi/content/abstract/79/6/442>

Kiragu, K. (2001). Youth and HIV/AIDS: Can we avoid catastrophe? *Population Reports*, Series L, No. 12. Baltimore, the Johns Hopkins University Bloomberg School of Public Health, Population Information Program, Retrieved from <http://www.infoforhealth.org/pr/112/112print.shtml>

Leedy, P. D. & Ormrod, J. E. (2001). *Practical research: Planning and design*. (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Lloyd, G.A. (2004). HIV/AIDS Overview. In *Encyclopedia of Social Work* (19th Ed.). Washington, DC: NASW Press p. 1257-1282.

Madise, N.; Zulu, E. and Ciera, J. (2007). Is Poverty a Driver for Risky Sexual Behaviour? Evidence from National Surveys of Adolescents in four African Countries. *African Journal of Reproductive Health*; 11[3]:83-98. Retrieved from eprints.soton.ac.uk/55079/.

Marston, C. & King, E. (2006). Factors that shape young people's sexual behaviour: a systematic review. *Lancet*, 368:1581–1586. Retrieved from www.unaids.org

McQueen, R. A. & Knussen, C. (2006). *Introduction to research methods and statistics in psychology*. London: Pearson Prentice Hall.

Meiberg, A.E., Arjan E. R.B, Hans, E.O. and Herman P. S. (2008). Fear Of Stigmatization As Barrier To Voluntary HIV Counselling And Testing In South Africa. *East African Journal of Public Health*, 5 (2): 49-54. Retrieved from www.popline.org/docs/1805/323080.html

Monasch, R. & Mahy, M. (2006). World Health Organization Technical Report Series: 938:15-41; Discussion 317-41. Retrieved from www.labmeeting.com/papers/author/mahy-m

National Agency for the Control of AIDS (NACA, 2012). National HIV/AIDS Prevalence <http://naca.gov.ng/content/view/87/125/lang.en/>

National HIV/AIDS and Reproductive Health Survey (NARHS, 2007). Factsheet 2011: Update on the HIV/AIDS Epidemic and Response in Nigeria. Retrieved from <http://naca.gov.ng/>

National Population Commission (2003). Nigeria Demographic and Health Survey. Retrieved from <http://www.measuredhs.com/pubs/pdf/FR148/00FrontMatter.pdf>.

NCPI (2012). Nigeria Report. Retrieved from <http://aidsreportingtool.unaids.org/143/nigeria-report-ncpi>

Nyamathi, A. M., Stein, J. and Swanson, J.M. (2000). Personal, cognitive, behavioral, and demographic predictors of HIV testing and sexually transmitted diseases in homeless women. *Journal of Behavioural Medicine*; 23:123–47. Retrieved from <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1490105>

Okhiade, E. (2003). Youths/adolescents in Nigeria : An inadequately served population. Retrieved from <http://unlimitedgrace.tigblogs.org/>

Oster, E. (2005). "Sexually Transmitted Infections, sexual behaviour and the HIV/AIDS Epidemic," *Quarterly Journal of Economics*, 120 (2), 467–515. Retrieved from www.longwoods.com/product.php?productid=19344&cat=469&page=1

Papalia, D. E.; Olds, S. W. & Feldman, R. D. (2001). *Human Development* (8th ed.). Boston: McGraw Hill

Peralta, L.; Deeds, B. G.; Hipszer, S. and Ghalib, K. (2007). Barriers and facilitators to adolescent HIV testing. *AIDS Patient Care & STDS*, 21(6):400-408. Retrieved from www.ncbi.nlm.nih.gov/pubmed/17594249

Sherr, L, Lopman, B., Kakowa, M, Dube, S., Chawira, G., Nyamukapa, C., Oberzaucher, N., Cremin, I. and Gregson, S. (2007) Voluntary counselling and testing: uptake, impact on sexual behaviour, and HIV incidence in a rural Zimbabwean cohort. *AIDS*. 23:21(7):851-860. UCSF Institute for Global Health Literature Digest. Retrieved from hivinsite.ucsf.edu/InSite?page=jl-14-04

Solomon, V.; Van Rooyen, H.; Griesel, R.; Gray, D.; Stein, J. and Nott, V. (2004). Critical Review and Analysis of Voluntary Counselling and Testing Literature in Africa. Retrieved from <http://www.hst.org.za>

Stoneburner, R. and Low-Beer, D. (2004). "Population-Level HIV declines and behavioural risk avoidance in Uganda," *Science*, 304, 714–718. Retrieved from home.uchicago.edu/~eoster/hivbehavior.pdf.

Tadele, G. (2000). Sexuality and HIV/AIDS Risk and Perception among Male Street Youths in Dessie. *Northeast African Studies*. 7(1): 109-126. Retrieved from http://etd.uwc.ac.za/usrfiles/modules/etd/docs/etd_init_3582_1174044987.pdf Michigan State University Press

- Thornton, R. (2006). "The Demand for and Impact of Learning HIV Status: Evidence from a Field Experiment," Mimeo: Harvard University. Retrieved from home.uchicago.edu/~eoster/hivbehavior.pdf
- Toroitich-Ruto, C. (2000). The Effect of HIV/AIDS on Sexual Behaviour of Young People in Kenya. Nairobi: Family Health International 6: 34. Retrieved from womenandaids.unaids.org/docs/KenyaAccessAndBarriers_en.pdf
- UNAIDS (2011). Report on the Global AIDS Epidemic. Retrieved from <http://www.unaids.org>
- UNAIDS (2008). 2008 AIDS Epidemic Update. Retrieved from http://data.unaids.org/pub/EPISlides/2008/2008_epiupdate_en.pdf
- UNAIDS (2006). Report on the Global AIDS Epidemic; May 2006. Retrieved from <http://www.unaids.org>
- UNAIDS/WHO (2006). Report on the global AIDS epidemic. Retrieved from www.avert.org/worldstats.htm
- UNFPA (2004). Youth friendly health services. *Entre Nous: The European Magazine for Sexual and Reproductive Health in Europe* NO 58, Retrieved from www.euro.who.int/entrenous <http://www.euro.who.int/document/ens/en58.pdf>
- UNFPA (2003). "State of the World Population 2003" Making 1 Billion Count: Investing in adolescents' health and rights. Retrieved from <http://www.unfpa.org/swp/2003/english/ch1/>
- UNICEF (2006). HIV/AIDS: Prevention of infection among adolescents and young people. Retrieved from <http://www.childinfo.org/areas/iv aids/youngpeople.php>
- UNICEF (2005). HIV/AIDS and children. Retrieved from <http://www.unicef.org>
- UNICEF, UNAIDS, and WHO (2002). Young People and HIV/AIDS, Opportunity in Crisis. Retrieved from <http://www.unicef.org/pubsgen/youngpeople/hiv aids/youngpeople-hiv aids.pdf>
- Uwalaka, E. & Matsuo, H. (2002). Impact of knowledge, attitude and beliefs about aids on sexual behavioural change among college students in Nigeria: The case of the University of Nigeria, Nsukka. *West Africa Review* 3 (2). Retrieved from www.westafricareview.com/vol3.2/uwalaka-matsuo.html
- Weiser, S. D., Heisler, M., Leiter, K., Percy-de Korte, F., Tlou, S., Demonner, S., Phaladze, N., Bangsbrq, D. R., Iacopino, V. (2006). Routine HIV Testing in Botswana: A Population-Based Study on Attitudes, Practices, and Human Rights concerns. *PLoS Medical* 3: e261. Retrieved from www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0030261
- WHO (2007). HIV/AIDS in the South-East Asia region. New Delhi, WHO Regional Office for South-East Asia. Retrieved from <http://www.searo.who.int/hiv-aids>.
- WHO. (2006). Preventing HIV/AIDS in young people: a systematic review of the evidence from developing countries, WHO Technical Report Series No. 938.

- August. World Health Organization, Geneva. Retrieved from www.unaids.org
- WHO (2003). HIV Testing and counselling: the gateway to treatment, care and support. Retrieved from <http://www.who.int/hiv/en/>
- Williams, B.G, Taljaard, D., Campbell, C.M., Gouws, E., Ndhlovu, L., Van Dam, J., Carael, M. and Auvert, B. (2003). "Changing patterns of knowledge, reported behaviour and sexually transmitted infections in a South African gold mining community.", *AIDS*, 17 (14), 2099–2107. Retrieved from home.uchicago.edu/~eoster/hivbehavior.pdf
- WHO/GPA (1988b). WHO, Global Program on AIDS. Progress Report Number 4. Geneva
- WHO/UNAIDS/UNICEF (2007). Towards Universal Access, Scaling Up Priority HIV/AIDS Interventions in the Health Sector, April Progress Report. Retrieved from <http://www.who.int/hiv/universalaccess2010/en/>
- World Youth Report (2003). Youth at the United Nations. Retrieved from <http://www.un.org/youth>
- World Bank (2012) 'Nigeria HIV/AIDS Program Development Project II' Accessed 22nd November 2012
- WHO (1998). HIV in Pregnancy: A Review. WHO/RHT/98.24. Geneva.
- Yahaya, L. A. (2007). Trends and challenges of HIV/AIDS counselling in Nigerian secondary schools. A case study of Kwara State. Paper presented at the 8th Counselling Conference of Kenya Association of Professional Counsellors. 4th- 6th September, 2007. Retrieved from www.kapc.or.ke/index_files/dr-yahaya_lasiele_alabi.pdf
- Zhou, L., Guo, J., Fan, L., Tian, J. & Zhou, B. (2009). Survey of motivation for use of voluntary counselling and testing services for HIV in a high risk area of Shenyang, China. *BMC Health Services Research* 2009, 9:23, Retrieved from <http://www.biomedcentral.com/1472-6963/9/23>