

## Comparison of Perception of HIV/AIDS Risk and Sexual Risk Behaviours Among Youths with and without Disabilities in Oyo State, Nigeria

Umoren, Anietie M<sup>1</sup>. and Adejumo, Adebayo A.

Dept of Psychology, University of Ibadan, Nigeria

*The study investigated the perception of HIV/AIDS risk and sexual risk behaviours among youths with disabilities (YWD) in comparison with youths without disabilities (comparison group). The study adopted a cross-sectional survey with 362 participants comprising 181 YWD with visual impaired 29(16%), physically challenged 40 (22.1%) and hearing impaired 112 (61.9%) and comparison group (N = 181). A 19-item structured questionnaire was used for data collection. The instrument was revalidated and found to be highly reliable and valid for the study. Kruskal-Wallis test for differences was used to determine the differences in perception of HIV/AIDS risk and sexual risk behaviours among the two groups as well as t-test. The results showed that there was a significant difference in perception of HIV/AIDS risk between YWD and the comparison group [ $X^2 = (1) = 27.79, p < 0.01$ ] as well as a significant difference in sexual risk behaviours among the two groups [ $X^2 = (1) = 23.117, p < 0.01$ ]. The t-test also revealed a significant difference between the groups on sexual risk behaviours [ $t(360) = 4.926, p < 0.01$ ] and HIV/AIDS risk [ $t(360) = 5.301, P < 0.01$ ]. It was further reported that YWD recorded higher sexual risk behaviour ( $\bar{x} = 9.35, SD = 4.137, n = 181$ ) than the comparison group ( $= 7.48, SD = 3.008, n = 181$ ). This trend was also reported on HIV/AIDS risk, with YWD recording higher ( $= 14.56, SD = 6.537, n = 181$ ) than the comparison group ( $= 11.23, SD = 5.385, n = 181$ ). The findings of the paper were duly discussed with far reaching recommendations for policy making. The study offers a new understanding of the perception of the HIV/AIDS risk and sexual risk behaviour in this group of youth population as well as provide relevant stakeholders with new vista in handling HIV/AIDS issues and sexuality of the disabled.*

### Introduction

HIV/AIDS risk perception and sexual risk behaviour among youths in general and the disabled population in particular have received a growing attention in research in recent times. Despite the growing knowledge of HIV/AIDS, its spread has continued among the youth population (UNAIDS, 2006). This trend has become

worrisome among public health scholars, psychologists and other relevant stakeholders. In Africa, studies showed that youth HIV/AIDS knowledge and awareness is high and well taken and yet reports show that a good number of youths consider themselves less risky to HIV/AIDS as a result of denial and

misconceptions of transmissions and prevention (Lunani, 2006; NASCOP, 2005; Sabwa, 2000). Sexual risk behaviours among youth with active sexual activities are well documented in the literature (Elliot & Brantley, 1997; Hingson, Strunnin, Berlin & Heeren, 1990 and Olley, 2005). The poor or no relationship between HIV/AIDS knowledge and sexual risk behaviour is reported in other studies outside Africa (Ukwuani, Tsui & Suchindran, 2003; Camlin and Chimbwete, 2003 and Macintyre, Brown & Sosler, 2001). However, findings of such relationship from studies in Africa are mixed (Barden-O'Fallon, et al, 2004, MacPhail & Campbell, 2001).

Perceived HIV/AIDS risk which is an individual belief of being vulnerable to the HIV/AIDS disease is explained in cognitive-behavioural and social learning theories as well as health belief model. Consequences of behaviours are factors that predict the occurrence of or otherwise of such behaviours. Providing explanation for health related behaviours, health belief models opine that perceived individual vulnerability, severity, expected possible benefits of preventive actions, and barriers to these actions regulate human behaviours (Becker, 1974 and Rosenstock, 1996). Therefore, adopting a particular behaviour is rather systematic rather than spontaneous (Garrard, Gibbons and Bushman, 1996).

Behaviours considered are behaviours that expose an individual to sexually transmitted diseases (STDs) which HIV/AIDS is one. These behaviours are non-condom use, alcohol and drug use before and during sexual activities, multiple sex partners and sex with commercial sex workers. Olley (2005) reported high sexual risk behaviours among female university students in Nigeria. Reports from South Africa indicated that most youths (82% males and 83% females) considered themselves as less or no risk of HIV/AIDS. The study further found that higher sexual experience was associated with higher HIV/AIDS risk among females than males (Anderson, Beutel and Maughan-Brown, 2007).

There have been misconceptions by the general public about sexuality of people with disability. This has not been publicly discussed or adequately explored in order to put this group of people at a vantage position on their sexuality compared to the general population.

The subject of disability and sexuality is often-time seen as taboo and should be kept secret and out of public discourse. However, the realities of sexual-affective circle of disability have been only recently liberated from some of taboos (Deepak, 2002). It is now possible to speak about sexuality and it is also possible to speak about disability but if you try to bring together the two subjects as a common reality, suddenly the same old taboos rise up again. The two terms are seen in antithesis to each other, negating each other (Malaguti, 1993). It is clear that sexuality is not an integral part of the lives of people with either intellectual or physical disability (McCabe, 1999). As a result, they are left in the dark and allowed to function basically on trial and error. Information on sexuality is largely scarce among this group of people, thereby making them highly vulnerable to opportunistic disease attack such as HIV/AIDS and other STDs.

Among the disabled population, studies showed that people with disabilities have knowledge of HIV/AIDS in most countries in Africa (Osowole, 2000; Banda, 2005 and Giros, 2004) and believe they are at risk of contacting the diseases (Hanass-Hancock, 2009). However, studies have shown that HIV/AIDS is more prevalent among this group of the population than the general population and more likely to engage in sexual risk behaviour (Rohleder P.; Eide A. H.; Swartz L. et al.). Comparing with the general population, their knowledge of HIV/AIDS is considered less (Kendi, Mweru & Kinai, 2012). In a comparative study between visually impaired and sighted adolescent, Kendi, Mweru & Kinai, (2012) reported HIV/AIDS knowledge score of 87.61% for visually impaired and 92.95% for sighted adolescent. This low knowledge of HIV/AIDS is occasioned by

faulty perception of HIV/AIDS and its mode of transmission. Poor and faulty knowledge of mode of HIV/AIDS transmission among disabled people has been reported in Nigeria (Enwereji & Enwereji, 2008). Otte, et al. (2008) found out that in Nigeria and Swaziland, blind adolescents reported wrong modes of transmission and prevention of HIV/AIDS. Wazakili et al, (2008) also found that people with physical disabilities are limited in their knowledge about HIV/AIDS and thus their sexual behaviour is not informed by what they know. Several other studies corroborate these findings of what HIV/AIDS is and how it is transmitted (Giros, 2004; Munthali, Mvula & Ali, 2004 and Dawood, Bhagwanjee, Govender & Chohan, 2006) as well as its preventions.

Further, studies in Africa on disabilities revealed that despite the widely held misconceptions, people with disabilities are actually active sexually (Hanass-Hancock, 2009, and Alamrew, Tareken, Alamirew & Asres, 2014) and engaged in one sexual risk behaviour or another. Sexual uptake among people with disabilities is earlier than the general population reporting first sexual experience at age 14 as against 16.5 in the general population (Dawood et al. 2006). Alamrew et al. (2014) in their recent findings reported an earlier sexual uptake of 9 years among PWD in Ethiopia. In a study in Kenya and Cameroon, it is shown that people with disability engage in sexual behaviors that are risky such as multiple partners, exposure to sexual violence (rape) and unprotected sex (without condom). Of the 35% of the disabled people with risky sexual behavior, physically disabled people ranked higher with 14% among this population. Further, Alamrew, et al (2014) found that a greater percentage of PWD engaged in sex with multiple sex partners (43.9%) and condom use inconsistency (90.3%) with an overall sexual risk behaviour prevalence rate of 32.5%.

Factors associated with sexual risk behaviours were found to include alcohol consumption, age, family size and level of education (Alamrew et al. 2014).

Adejumo & Umoren (2013) reported higher HIV/AIDS vulnerability among disabled males than females. The study also revealed that condom use self-efficacy and attitude to condom use were significant factors influencing sexual attitude of youths with disabilities. Non-condom usage among disabled people makes 34% of the total population. In a study of two cities in Nigeria (Abia and Oyo) among hearing impaired and persons with leprosy, Enwereji & Enwereji (2008), found that more than half of the study participants were not willing to go for HIV/AIDS counselling and sex education. They also reported high rate of unprotected sex practices and cohabitation with opposite sex. Also, women have the highest number of multiple sexual activities (54.3%) than men (53%) in Cameroon, (Handicapped Intervention, 2003 and Touko, Mbou, Tohmuntain & Perrot, 2010). Kendi, Mweru & Kinai, (2012) reported high risk perception of HIV/AIDS (25%) among visually impaired students than sighted students (18%). The high perceive HIV/AIDS vulnerability among this group is as a result of high prevalence of sexual risk behaviours, fear of rape, sexual abuse and other sexual molestation, exploitation and inability to negotiate safe sex (Mulindwa, 2003; The Steadman Group, 2007 and Kendi, Mweru & Kinai, 2012). Low condom use was reported among the deaf in Cameroon showing 24% in men and 10% in women (Touko, 2009). Stigmatization and discrimination, generally associated with people living with a disability, constitutes important sexual vulnerability factors that add to other inherent bio-psychosocial factors of disability. Other risk factors that increase the vulnerability of persons with disability to HIV include sexual violence, poverty, cultural practices, (Mulindwa, 2003; Groce, 2004; Yousafzi, Dlamini, Groce and Wirz, 2004).

From the literature reviewed above, there is an indication of little or no evidence of comparative studies of the disabled group and non-disabled group in terms of perception of sexual risk behaviour and HIV/AIDS risk. Therefore, this study seeks to add

value to the existing literature in this area. Also, looking at the large number of youths in schools and colleges, especially those with disabilities and considering the fact that this sub-group of the youth population is often marginalised in HIV/AIDS issues as it relates to their sexual behaviour, it is pertinent to examine the following questions and find answers to them:

1. What is the perception of HIV/AIDS risk among youths with disabilities (YWD) and those without disabilities (comparison group)?
2. What is the perception of sexual risk behaviour of youth with disabilities (YWD) and those without disabilities (comparison group)?
3. Is there any significant difference between YWD and comparison group on HIV/AIDS risk and sexual risk behaviour?

### Method

The comparative survey adopted a cross-sectional design. The variables of interest are HIV/AIDS risk and sexual risk behaviour.

### Setting

The study took place in government institutions for People Living with Disability (PLWD) and people without disabilities (comparison group) in two cities, i.e. Ibadan and Oyo town, South West, Nigeria. These institutions have a fairly balanced mix of youths with and without disabilities. The major inhabitants of the study location are called *Yorubas*, the second largest ethnic group in Nigeria (NPC, 2007). Youths with disabilities i.e. the blind, deaf and physically challenged were compared with youths in the institutions without any obvious disability as controls. Physically challenged is defined here as people with any form of physical deformities or defects other than blind and deaf. They were purposively selected from the list of youths in the institutions.

### Ethical Procedure, Inclusion and Exclusion Criteria

The protocol for the study was duly reviewed and ethical permission received from the State Ministry of Health Ethics Committee. Youths with disabilities were required to fulfil eligibility criteria including:

1. Living with a disability, i.e. either deaf, blind or physically challenged as defined earlier.
2. Currently registered with any of the following institutions as a student, or trainee, i.e. the Federal College of Education (Special), Oyo Town; The State Rehabilitation Centre for the Disabled, or the Chesire Home for the Disabled in Ibadan.
3. English literate or able to read the English Braille research questionnaire and consent form.
4. Expression of autonomous desire (informed consent) to participate.
5. Confirmed by the instructor or class teacher to be between 16 and 30 years old.
6. The comparison group i.e. youths without disabilities in these institutions (Federal College of Education -Special and University of Ibadan) were also expected to fulfil conditions 2, 3, 4, and 5 above.

### Sampling and Participants

Following discussions on the scientific and ethical validity of the study, approval to have access to the participants was obtained. Subsequent discussions about the study were held with potential participants, while research assistants with special trainings in the areas of sign language and Braille facilitated communication with the deaf and the blind respectively. Twenty-nine visually impaired youths in the institutions responded, fully-completed, and returned the questionnaires. In a similar manner, 112 youths with hearing impairment as well as 40 physically challenged youths also participated. Thus, all the 181 YWD who expressed their willingness were purposively selected. In order to make comparisons; for the number of YWDs participating in each institution an equal number of youths without disability were systematically

selected, making a total of 362 participants. Similar sampling method and sample size were adopted in similar local and foreign studies (Filolade, 2007; Hoffman et al. 2007 and Sangowanwa et al. 2009).

**Instruments**

A 19-item structured self report questionnaire divided into Sections A to C was used to collect data. Section A contained 6 items seeking information on participants’ bio-data. Section B contained the 7-item questionnaire assessing HIV/AIDS risk, adapted from Koopman and Reid (1998)’s work. It has a 5-point response rating scale of strongly agree to strongly disagree. A high score on the scale indicates high level of HIV/AIDS risk, vice versa. The authors reported a Cronbach alpha reliability coefficient of 0.86, and a mean of  $\bar{X}$ =25.60. A revalidation of the scale yielded Cronbach alpha of 0.91; split half reliability of 0.87 for part one, and 0.76 for part two, indicating that the scale was very reliable in measuring HIV/AIDS risk among YWD in Nigeria; while a Cronbach alpha of 0.83 was reported among youths in the comparison group. To establish norms, mean score of =14.56 and S.D.=6.5 was reported among YWD, while a mean of =11.24, and S.D. of 5.41 were reported in the comparison group.

Section C measured Sexual Risk Behaviours developed by Lawal and Olley (2010). It has 6 items measuring response on 4 point Likert scale ranging from “Always”=4, “Sometimes”=3, “Occasionally”=2 and “Never”= 1 respectively. The scale has reliability coefficient of 0.82. The revalidation of the scale showed a Cronbach alpha of 0.84; Mean of =7.48 and SD of 3.0 for comparison group; while among the YWD, it reported a Cronbach alpha of 0.83, a Mean of =14.56 and SD of 6.5 were observed.

**Procedure**

Data collection was done through the administration of questionnaires in the schools selected for the study. In every school visited, letters of introduction and

ethical approval were presented to each of the school authorities. Thereafter the researchers met the class teachers and prospective participants with the help of the research assistants. Questionnaires were given to consenting participants, allowed to read through the documents, complete the questionnaires and returned same directly to the research assistants within two days. Data obtained from the field were coded, entered into the computer using SPSS 17. Both descriptive and inferential statistics were adopted with calculations done at 0.05 level of significance. Descriptive and inferential statistics including chi-square and t-test were used in analyzing the data.

	YWD		Comparison Group	
Age	N	Percentage	N	Percentage
16-20	148	81.8%	38	21%
21-25	33	18.2%	67	37%
26-30			76	42%
<b>Gender</b>				
Male	105	58%	117	64.6%
Female	76	42%	64	35.4%
<b>Marital Status</b>				
Single	169	93.4%	144	79.6%
Married	12	6.6%	37	20.4%
<b>Religion</b>				
Christianity	116	64.1%	143	79%
Islam	61	33.7%	38	21%
No Religion	4	2.2%		
<b>Education</b>				
Secondary	109	60.2%	59	32.6%
Tertiary	72	39.8%	122	67.4%
<b>Disability</b>				
Visually Impaired	29	16%		
Physically				
Challenged	40	22.1%		
Hearing Impaired	112	61.9%		
N=181			N=181	

Table 1 shows that of the 181 YWD, 29 (16.0%) were visually impaired, 40 were physically challenged (22.1%) while 112 were hearing impaired (61.9%). Their ages ranged from 16 to 25 years with mean age of 20.3 years. Participants' gender shows that, 105 (58%) were males while 76 (42%) were females. In terms of marital status, 169 (93.4%) were single, while the remaining 12 (6.6%) were married. About the comparison group, 117 (64.6%) were males while 64(35.4%) were females. Their ages ranged from 16 to 30 years with an average age of 24.5 years.

**Hypothesis 1.** What is the perception of HIV/AIDS risk among youths with disabilities (YWD) and those without disabilities (comparison group)?

In assessing the HIV/AIDS risk perception of participants, a five Likert scale was used. After analysing the responses on the scale, scores were collapsed into 3 scales and reported as above.

'Strongly disagreed' and 'disagreed' were summed up to make the score for 'disagreed' and 'strongly agreed' and 'agreed' were summed up to make up 'agreed' score, while 'undecided' was retained as it were.

Table 2 shows that a greater percentage of participants (both YWD and comparison group) disagreed with all the items on HIV/AIDS risk perception. However, agreement on all the items except one showed that YWD had higher score than the comparison group. Whereas 22.7% (41) of YWD agreed that there were greater chances of contracting HIV/AIDS in the next 5 years, only 3.3% (6) agreed to this among the comparison group. In all the items, the perception of

**Table 2. Perception of HIV/AIDS Risk**

Items	YWD			Comparison Group		
	Disagree	Undecided	Agree	Disagree	Undecided	Agree
There is a good chance I will get HIV/AIDS during the next 5 years	132(72.9%)	8(4.4%)	41(22.7%)	175(96.7%)	3(1.7%)	6(3.3%)
I am at risk of HIV/AIDS	122(67.4%)	22(12.2%)	37(20.4%)	165(91.2%)	7(3.9%)	16(8.8%)
My friends are at high risk of HIV/AIDS	114(62.9%)	23(12.7%)	44(24.3%)	133(73.5%)	37(20.4%)	48(26.5%)
There is a possibility that I have HIV/AIDS	139(76.8%)	15(8.3%)	27(14.9%)	163(91.1%)	6(3.4%)	16(8.9%)
I may have had sex with someone who was at risk of HIV/AIDS	133(73.5%)	14(7.7%)	34(18.8%)	151(83.4%)	10(5.5%)	30(16.6%)
My Sexual activities put me at risk of HIV/AIDS	134(74%)	18(9.9%)	29(16%)	162(89.5%)	4(2.2%)	19(10.5%)
I am worried that I might get infected with HIV	129(71.3%)	16(8.8%)	36(19.9%)	162(89.5%)	2(1.1%)	19(10.%)

*Comparison of Perception of HIV/AIDS Risk and Sexual Risk Behaviours Among Youths with and without Disabilities in Oyo State, Nigeria*

having friends that were at high risk of HIV/AIDS accounted for 24% agreement among YWD with the comparison accounting for 26% of the responses. Individual high risk of HIV/AIDS recorded more than 20% agreement among YWD, while the comparison group response was 16% agreement. Among YWD, more than 18% agreed that they may have had sex with someone at risk of HIV/AIDS compared to 16.6% among the comparison group. Sixteen percent of YWD agreed that their sexual activities put them at

risk of HIV/AIDS while only 10% of the comparison group agreed to this. Finally, agreeing to worry of being infected with HIV/AIDS accounted for almost 20% among YWD while half of this figure (10%) agreed to this among the comparison group.

**Hypothesis 2:** What is the perception of sexual risk behaviour of youth with disabilities (YWD) and those without disabilities (comparison group)?

Items	YWD				Comparison Group			
	Never	Occasionally	Sometimes	Always	Never	Occasionally	Sometimes	Always
I have taken alcohol heavily before having sex in the last 3 months	137(75.7%)	19(10.5%)	12(6.6%)	13(7.2%)	155(85.6%)	11(8.1%)	7(3.9%)	8(4.4%)
I have had sex with a commercial sex worker in the last 3 months	139(76.8%)	20(11%)	10(5.5%)	12(6.6%)	167(92.3%)	6(3.3%)	6(3.3%)	2(1.1%)
I have had sex with a casual friend I met for the first time in the last 3 months	119(65.7%)	28(15.5%)	15(8.3%)	19(10.5%)	161(89%)	8(4.4%)	7(3.9%)	5(2.8%)
I have has sex with someone more than one time apart from my primary partner without condoms in the last 3 months	128(70.7%)	18(9.9%)	22(12.2%)	13(7.2%)	147(81.2%)	19(10.5%)	10(5.5%)	5(2.8%)
I did not use condom at my last sex in the last 3 months	111(61.3%)	26(14.4%)	20(11%)	24(13.3%)	138(76.2%)	18(9.9%)	16(8.8%)	9(5%)
I have had sex with a partner with intravenous drug use (i.e. syringe) in the last 3 months	131(72.4)	23(12.7%)	10(5.5%)	17(9.4%)	166(91.7%)	8(4.4%)	3(1.7%)	4(2.2%)

Perception of Sexual risk behaviour among youth with disabilities (YWD) in comparison with youth without disabilities (comparison group) is one of the major object of the study. Table 3 presents the perception of sexual risk behaviour between YWD and the comparison group. Participants' perception was assessed on 4-Likert scale ranging from Never (1) to Always (4).

The result showed that majority of participants in both groups reported that they never engaged in any of the listed sexual behaviours. However, there were marked differences in the responses of YWD compared to the comparison group with the former having higher scores than the later. Among YWD, 13% said they did not use condom during sex in the last three months compared to only 5% in the comparison group. Occasionally, 14% of YWD said they used condom as against 10% in the comparison group and 11% of YWD sometimes used condom during sex in the last 3months as against 9% in the comparison group. More than 10% of YWD always had sex with casual friends they

met for the first time in the last 3months while less than this number (2.8%) was reported among the comparison group. Also, more than 15% of YWD engaged in this activity occasionally compared to less than 5% in comparison group. More than 12% of YWD said they sometimes engaged in sex with multiple partners in the last 3months while half of this number (6%) was reported among the comparison group. More than 7% of YWD practiced this always as against less than 3% in the comparison group. Finally, YWD reported that they occasionally took heavy alcohol before sex in the last 3months, while 8% reported this among the comparison group, 7.2% engaged in this always and almost 7% sometimes practiced this. Among the comparison group, less than 4% sometimes use alcohol before sex while less than 5% engaged in this always.

Hypothesis 3. Is there any significant difference between YWD and comparison group on HIV/AIDS risk and sexual risk behaviour?

**Table 4. T-Test of Independent Comparison of Means Performance of the two populations (Youth with disabilities and Youths without disabilities) on Sexual Risk Behaviour and Perceived HIV/AIDS Vulnerability.**

Population	Sexual Risk Behaviour					Perceived HIV/AIDS Vulnerability						
	n	X	SD	DF	t	Sig	n	X	SD	DF	t	Sig
Youth with Disabilities	181	9.35	4.137				181	14.56	6.537			
Comparison Group	181	7.48	3.008				181	11.23	5.385			
				360	4.926	0.000				360	5.301	0.000



N = 362

$\bar{X}$  = 8.41 (Sexual risk behaviour)

12.90 (Perceived HIV/AIDS Vulnerability)

Table 3 shows that the comparison of the two groups (disability group and without disability group) also confirmed the findings in Tables 1 and 2 above. The independent t-test analysis indicates that youths with disabilities reported high mean score ( $\bar{x}$  = 9.35, SD = 4.137, n = 181) on sexual risk behaviour, while the comparison group reported low mean score (= 7.48, SD = 3.008, n = 181). The result further showed that there was a significant difference in sexual risk behaviour of the two groups [t (360) = 4.926, P < .01]. Also, youth with disabilities recorded high score (= 14.56, SD = 6.537, n = 181) on perceived HIV/AIDS vulnerability while those without disabilities (comparison group) had low score (= 11.23, SD = 5.385, n = 181). The difference in the mean scores of the groups was found to be highly significant [t(360) = 5.301, P < 0.01].

a. Kruskal Wallis Test b. Grouping Variable: group type

Table 5 further confirms that there was statistical difference between the perception of HIV/AIDS vulnerability of youths with disabilities and the comparison group. The Kruskal-Wallis test for difference shows [ $X^2$  (1) = 27.79, p < 0.01]. Therefore, the null hypothesis was rejected at 0.05 significant level. The mean ranks difference for each group shows  $\bar{x}$  = 14.6 and = 11.2 (for disabled and comparison group respectively) and was found to be significant.

**Table 5: Kruskal-Wallis test for differences between Youths with disabilities and the Comparison group on Perceived HIV/AIDS Vulnerability**

Ranks	Test Statistics <sup>ab</sup>				
	Group Type	N	Mean Rank	HIV/AIDS Vulnerability Score	
HIV/AIDS Vulnerability	Disabled Group	181	14.6	Chi-Square	27.79
	Comparison Group	181	11.2	Df	1
	Total	362		Sig	0.000

**Table 6: Kruskal-Wallis test for differences between Youths with disabilities and the Comparison group on Sexual Risk Behaviour**

Ranks	Test Statistics <sup>ab</sup>				
	Group Type	N	Mean Rank	Sexual Behaviour Score	
Sexual Risk Behaviour	Disabled Group	181	9.4	Chi-Square	23.117
	Comparison Group	181	7.5	Df	1
	Total	362		Sig	0.000

Table 6 also established that there was statistical difference between the sexual risk behaviour of youths with disabilities and the comparison group. The Kruskal-Wallis test for difference shows [ $X^2(1) = 23.117, p < .01$ ]. Therefore, the null hypothesis was rejected at 0.05 significant level. The mean ranks difference for each group shows  $\bar{x} = 9.4$  and  $= 7.5$  (for disabled and the comparison group respectively) and was found to be significant.

### Discussion and Conclusion

This study has been able to establish that there exist a significant difference in the perceptions of sexual risk behaviour and HIV/AIDS risk between youths with disabilities (YWD) and those without disabilities (comparison group). While YWD reported high sexual risk behaviour, the comparison group reported low sexual risk behaviour. The high score of sexual risk behaviour among YWD compared to the comparison group with low score is very instructive. This implies that this group of youths is at grave risk of HIV/AIDS and other STDs since one major mode of HIV/AIDS and other STDs transmission is through sexual activities. Also, this could mean that they have not well grasped the consequences of these risk behaviours on themselves and to those around them. This could be as a result of poor and/or little or no sexual risk awareness among this group of people of what sexual risk behaviours are. The high sexual risk behaviour recorded among YWD further revealed in their responses that they had engaged in sexual activities such as sex with multiple partners, sex under alcohol influence, unprotected sex, patronising commercial sex workers, etc with higher response rate than the comparison group. Comparing this finding with similar studies, the high sexual risk behaviour recorded among females against males by Olley (2005) was among non-disabled undergraduate students. Therefore, this finding is a value addition to literature in the area of sexual risk behaviour and HIV/AIDS risk among people with disabilities (YWD). This is because it has

further disapproved the mythology of sexual inactivity of YWD and establish the fact that YWD needs attention more than the general population. Given the peculiar nature of this group, greater sex education is highly imperative among this group in order to correct this anomaly and reduce these behaviours among this group.

It is also instructive to find that perception of HIV/AIDS risk among YWD was higher than that of their non-disabled counterparts. These findings support the relationship between sexual risk behaviour and perceived HIV/AIDS vulnerability in other similar studies (Ukwuani, Tsui & Suchindran, 2003; Camlin & Chimbwete, 2003 and Umoren & Adejumo 2014) even though they were mixed (Barden-O'Fallon, et al, 2004, and Smith & Morrison, 2006). The explanation of this difference is attributed to high percentage of sexual risk behaviours recorded among this group. Also the inability to negotiate self sex could explain this high HIV/AIDS risk perception. This could be seen in the responses among YWD which showed that more than 12% of respondents sometimes engaged in sex with multiple partners without condom while more than 7% engaged in this act always compared to 6% and 3% respectively in the comparison group. Others are engaged in sexual activities under the influence of alcohol and drugs and patronised commercial sex workers. HIV/AIDS risk knowledge gap between YWD and the general population (Kendi, Mweru & Kinai, 2012) could account for this high HIV/AIDS risk perception. This further means that disabled youths are less knowledgeable about HIV/AIDS in terms of its effects, mode of transmission and prevention, thereby making them engaged in sexual risk behaviours in the first place (Enwereji & Enwereji, 2008). Further, poor communication from relevant stakeholders to effectively engage this group in proper education on the subject of sexual risk behaviours as well as HIV/AIDS risk could be a factor. For instance, not everyone dealing with hearing impaired youths understands sign language. Not everyone dealing with

visually impaired youths is able to read, understand and interpret Braille, etc. Therefore, communication with this group is grossly difficult and could inform low knowledge and effective handling of HIV/AIDS matters among this group.

In conclusion, having established the difference in the perception of HIV/AIDS risk and sexual risk behaviour among YWD vis-a-vis the comparison group, and having discovered that this group have greater HIV/AIDS risk and engaged in more sexual risk behaviours than their counterparts (comparison group), it is important for the relevant stakeholders to pay more attention to this vulnerable group of youths. Efforts should be geared towards fashioning out more effective mode of communication with this group for effective sex education and HIV/AIDS risk awareness. This is because if this group is neglected, any effort towards HIV/AIDS alleviation and/or reduction in the general population would yield little or no results as this group will continue to exist as carriers which continues to spread the disease. Therefore, effective and rigorous advocacy is highly imperative and thereby recommended to tackle the spread of HIV/AIDS among the disabled youths by reducing sexual risk behaviours. This could be in the area of planning and executing effective programmes targeted at reducing sexual risk behaviours and improving HIV/AIDS knowledge as well as improving HIV/AIDS reduction skills of sexual health planners and those involved in the socio-psychological health of people with disabilities.

## References

- Adejumo, A.O. and Umoren, A. M. (2013). Psychological factors as determinants of sexual attitude among youths with disabilities (YWD) in Three South-West Nigerian Institutions. *International Journal of Humanities and Social Science*, 3(15), 104-114
- Alamrew, Z.; Tareken, M; Alamirew, A. and G. Asres (2014). Risky Sexual Behaviours and Associated Factors among People with Disabilities in Dessie City. *International STD Research & Reviews* 2(1): 38-50, Article Nò. ISRR.2014.005.
- Anderson, K. G.; M. B. Ann, and B. Maughan-Brown, (2007) HIV risk perceptions and first sexual intercourse among youth in cape Town, South Africa. *International Family Planning Perspectives*, 33(3): 98-105
- Banda I. (2005) Disability, Poverty and HIV and AIDS. *Disabled People International* . [<http://v1.dpi.org/lang-en/resources/details?page=326>].
- Barden-O'Fallon J. L. et al. (2004) Factors associated with HIV/AIDS knowledge and risk perception in rural Malawi, *AIDS and Behavior*, 8(2):131-140.
- Becker, M.H. (1974). The health belief model and personal health behavior. *Health Education Monographs*, 2, 324-588
- Camlin, C. S. and C. E. Chimbwete (2003). Does knowing someone with AIDS affect condom use? An analysis from South Africa. *AIDS Education and Prevention*, 15(3), 231/244.
- Dawood, N.; A. Bhagwanjee, K. Govender and E. Chohan (2006). Knowledge, attitudes and sexual practices of adolescents with mild mental retardation, in relation to HIV/AIDS. *African Journal of AIDS Research*, 12, 1-10
- Do, M. and D. Meekers (2008) Multiple sex partners and perceived risk of HIV infection in Zambia: attitudinal determinants and their gender differences, Paper presented at the Annual Meeting of the Population Association of America, New Orleans, April
- Elliott, L. and C. Brantley (1997) *Sex on Campus: The Naked Truth about the Real Sex Lives of College Students*. New York: Random House.
- Enwereji, E.E. and K.O. Enwereji (2008). Disabled Persons and HIV/AIDS Prevention: A case study of deaf and Leprosy persons in Nigeria. *East Africa Journal of Public Health*, 5(2), August.
- Filolade, T.O. (2007) A comparative study of risk behaviors and HIV/AIDS awareness among adolescents with and without hearing impairment in Western part of Nigeria. *International Journal of Emotional Psychology and Sport Ethics*, 7, 23-33. Retrieved June 3, 2013, from <http://www.ajol.info/index.php/ijepse/article/view/38209> (2007).
- Garrard, M.; F.X. Gibbons and B.J. Bushman (1996) Relationship between perceived vulnerability to HIV and precautionary sexual behaviour. *Psychological Bulletin*, 119 (3), 390-409
- Giros S. (2004) Prevention in practice: Three HIV/AIDS prevention programs for people with disabilities. *Symposium HIV/AIDS and disability - a global challenge. Koenigswinter, Germany*.

- Groce, N.E. (2004) HIV/AIDS and disability: Preliminary findings from the World Bank/Yale University global survey. In *Symposium HIV and disability - a global challenge*. Koengswinter, Germany IKO Verlag; 189-200.
- Hanass-Hancock, J. (2009) Disability and HIV/AIDS - a systematic review of literature on HIV/AIDS on Africa. *Journal of the International AIDS Society*, 12:34. <http://www.jiasociety.org/content/12/1/34>
- Hingson, R.W.; L. Strunnin, B.M. Berlin, and T. Heeren (1990). Beliefs about AIDS, use of Alcohol and Drugs, and Unprotected Sex among Massachusetts Adolescents. *American Journal of Public Health*, 80(3).
- Hoffman, S.; L. F. O'Sullivan; A. Harrison; C. Dolezal, and A. Monroe-Wise (2006). HIV risk behaviours and the context of sexual coercion in young adults' sexual interactions: results from a diary study in rural South Africa. *Sexually Transmitted Diseases*, 33(1): 52-58
- Kendi, L.; M. Mweru and T. Kinai (2012) HIV/AIDS Knowledge and Risk Perceptions of Visually impaired and Sighted pupils in Kenya. *European Scientific Journal*, 8(8). April
- Koopman, C. and H. Reid, (1998). Assessment of knowledge and beliefs about HIV/AIDS among adolescents. In: C.M. Davis, W.L. Yarber, R. Baureman, G. Schreer & S.L. Davis, (eds). *Handbook of sexuality-related measures: A compendium*. 2nd Ed, pp. 321-324. Thousand Oaks, CA: Sage
- Lawal, M. A. and B.O. Olley (2010). Development and validation of the sexual risk behaviour scale. *African Journal for the Psychological Study of Social Issues*, 13 (2)
- Macintyre, K.; L. Brown and S. Sosler (2001). It's not what you know, but "who you knew": examining the relationship between behavior change and AIDS mortality in Africa. *AIDS Education & Prevention* 13:160-174.
- MacPhail, C. and C. Campbell (2001) 'I think condoms are good but, I hate those things': condom use among adolescents and young people in a southern African township. *Social Science and Medicine*, 52 (11). 1613-1627. DOI: 10.1016/S0277-9536(00)00272-0
- Mulindwa I.N. (2003) *Study on reproductive health and HIV/AIDS among persons with disabilities in Kampala, Katakwi and Raikai districts* Kampala: Disabled Women's Network and Resource Organisation (DWNRO) Action AID Uganda.
- Munthali A, P. Mvula and S. Ali (2004). *Effective HIV/AIDS and reproductive health information to people with disabilities: a final report*. Centre for Social Research; 2004. Malawi
- National AIDS and STI control programme (2005). Ministry of Health, Kenya. *AIDS in Kenya*, 7th ed. Nairobi:
- National Population Commission: *National and state population and housing tables: 2006 census priority tables, 1*. Retrieved, April 17, 2013, from <http://www.population.gov.ng/index.php/publications/138-national-and-state-population-and-housing-tables-2006-census-priority-tables-vol-1> (2007)
- Olley, B.O. (2005). Gender Differences in Experience of Sexual Coercion, HIV-Risky Sexual Practices, and Knowledge and Aids among Fresh Undergraduates at a Nigerian University. *Ibadan Journal of the Social Sciences*, 3(2).
- Osole O. (2000) Effect of peer education on deaf secondary school students' HIV/AIDS knowledge, attitudes and sexual behaviour. *African Journal of Reproductive Health*, 4(2):93-103.
- Otte W.M.; F. V. Maas and A. de Boer (2008) Comparison of knowledge and accessibility to information sources of HIV/AIDS between blind and sighted populations in Nigeria. *AIDS Care*, 20:1093-1097.
- Rosenstock, I.M. (1966) Why people use health services. *Milbank Memorial Fund Quarterly*, 44, 94
- Sangowanwa, A.O.; E.T. Owoaje; B. Faseru; I.P. Ebong and B.J. Adekunle (2009). Sexual practices of deaf and hearing secondary school students in Ibadan, Nigeria. *Annals of Ibadan Postgraduate Medicine*, 7(1)
- Touko A. (2009). About a neglected group in the fight against HIV/AIDS: Sexual Behaviour and HIV Prevalence among Deaf Populations in Cameroon. *African AIDS Rhetoric Conference*. Durban. [<http://www.heard.org.za/african-leadership/disability/events/african-aids-rhetoric-conference>].
- Touko, A.; C. P. Mboua, P. M. Tohmuntain, and A. B. Perrot (2010). Sexual vulnerability and HIV seroprevalence among the deaf and hearing impaired in Cameroon. *Journal of the International AIDS Society*, 13:5
- Ukwuani F.A.; A.O. Tsui and C.M. Suchindran (2003). Condom use for preventing HIV infections/AIDS in Sub-Saharan Africa: a comparative multilevel analysis of Uganda and Tanzania, *Journal of Acquired Immune Deficiency Syndromes*, 34(2):203-213.
- UNAIDS, (2006) *2006 Report on the Global AIDS Epidemic*, New York: United Nations Publications.
- Wazakili, M.; R. Mpofu and P. Devlieger (2008). Should issues of sexuality and HIV and AIDS be a rehabilitation concern? The voices of young South Africans with physical disabilities. *Disability and Rehabilitation*, 31(1): 32-41