



PREVENTION OF HIV AND AIDS: A BASELINE GENDER COMPARISON OF KNOWLEDGE, ATTITUDE AND CONFIDENCE TO NEGOTIATE SAFER SEX AMONG TERTIARY STUDENTS OF THE UNIVERSITY OF IBADAN, NIGERIA

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ABSTRACT

Introduction

Thirty- three years into the HIV epidemic, studies have revealed that behaviour change is the most effective measure against its transmissions; hence there is a need to build the capacity of young persons who are greatly affected by the pandemic, if we are to achieve a near zero level of HIV transmission.

Method

This study was part of a baseline survey of a quasi experimental design. A total of 260 University of Ibadan students from 4 of the 16 batches of student volunteers at the 16 Training Workshops (TWs) were involved in this baseline study. A semi-structured self administered questionnaire at the beginning of each TW was used to assess respondents' socio-demographic information, knowledge of HIV-AIDS, attitudes toward people living with HIV-AIDS (PLWHA), confidence to negotiate sex and willingness to practise abstinence. Data were analyzed using descriptive statistics and Chi-square at $p < 0.05$.

Results of the 260 respondents, 51.5% were males and 48.5 % were female students. The age range of the respondents was 16 – 36 years and most (92.3%) lived on campus. There was no significant difference between the knowledge, interactions with PLWHA and dispositions towards abstinence between the 2 groups; however, there was a significant difference in sexual behaviour in the area of negotiating for safer sex in that 57.4% of the females do not feel confident to negotiate safer sexual behaviour (compared to 42.6% of the males), $P=0.00$.

Conclusions

Both male and female students were comparable on knowledge, attitude and benefits of abstinence in HIV-AIDS prevention strategies, but the female students had lower confidence in negotiating for safer sex. Interventions directed towards capacity building of the female students are required.

Key words: HIV-AIDS Knowledge, Attitude towards People Living with HIV-AIDS, Tertiary Students

Introduction

Despite the gaps that have been covered in the war against HIV and AIDS over the past 30 years, The Joint United Nations Programme on HIV/AIDS (UNAIDS) global report for the year 2013 revealed that 35 million [33.2 million–37.2 million] people were living with HIV, 2.1million [1.9 million–2.4 million] people became newly infected with HIV and 1.5 million [1.4 million–1.7million] people died from AIDS-related illnesses. The report further revealed that in sub-Saharan Africa, Nigeria, South Africa and Uganda are the three countries that account for 48% of all new HIV infections; Nigeria being the second largest contributor¹.

In Nigeria, the prevalence of HIV and AIDS among youths aged 15-24 years has declined over the years, now at 4.1 per cent as at the end of year 2010². However, this HIV burden in the youths is still quite enormous considering the population of the affected Nigerians. Findings from this survey report also showed that 3,459,363 people now live with HIV in Nigeria and an estimated 1,449,166 require ARV. In addition, the report showed that 388,864 new infections occurred in the year ended 2011, while 217,148 AIDS related deaths occurred for the same period³.

The statistics above indicate that some progress has been made in the fight against HIV and AIDS in Nigeria. However, with the current situation of the epidemic in the country, it is obvious that HIV and AIDS still pose a big challenge to the nation's health and development. HIV and AIDS have an adverse effect on the nation's economic growth by reducing the availability of human capital. In addition to this, PLWHA will also require significant medical care. Increasing mortality will result in reduction of population and labour force, that is predominantly young people with reduced knowledge and work experience leading to reduced productivity. In fact " its impact may erode the country's developmental goals and gains, as well as stultifying and destabilising the economy on our road to VISION 2020, if this pandemic not subdued" ³.

Studies have revealed that heterosexual sex is responsible for approximately 80-95 percent of HIV infections in Nigeria ^(2,4). Young persons in Nigeria are involved in risky sexual

behaviours which predispose them to HIV infection^(5,6). Although recent studies established that the awareness of HIV and AIDS is quite high in Nigeria, as the media has played a good role in ensuring this. However, comprehensive knowledge about HIV and AIDS is also still quite low among young persons⁷, and the predominant negative attitudes towards PLWHA is detrimental in the control of HIV infection.

Well-articulated prevention programmes addressing HIV and AIDS related knowledge - gaps among the general population, reduction of social stigmatization and risk behaviour modification, among other activities are proven strategies in the prevention and control of HIV and AIDS⁷.

Methodology

Study design

This study is part of a baseline survey in a quasi-experimental design. A total of 260 University of Ibadan students from 4 of the 16 batches of student volunteers during TWs on HIV&AIDS prevention were involved in this baseline study.

Study Area

University of Ibadan is the oldest University in Nigeria. It was established in 1948. It has 13 faculties: Arts, Science, Agriculture and Forestry, the Social Sciences, Education, Veterinary Medicine, Technology, Basic Medical Sciences, Pharmacy, Clinical Sciences, Law, Public Health and Dentistry. The University has 12 Halls of Residence. The students' current population is 33,481.

Method of data collection

A semi-structured self administered questionnaire was used to assess respondents' socio-demographic information, knowledge of HIV-AIDS, attitudes toward people living with HIV-AIDS (PLWHA), confidence to negotiate safer sex and willingness to practise abstinence.

Data analysis

Knowledge of HIV-AIDS was scored on a 13-point knowledge scale. Knowledge score of ≥ 7 was graded as good knowledge while score of ≤ 6 was graded as poor. Attitude towards PLWHA was graded on a 8-point scale; score of ≥ 5 as good while score of ≤ 4 was graded as poor. Every positive answer on confidence to negotiate safer sex were collated and graded as confident, while negative answers were collated and graded as not confident; the same process was applied to questions regarding abstinence. Data were analyzed using descriptive statistics and Chi-square at $p < 0.05$.

Results

Socio-demographic characteristics

As shown in Figure 1 below, the study consisted of 134 (51.5%) male students. Students within the age group 21-25 years account for 39.6% of the total respondents and most (84.2%) were undergraduates i.e. 100Level through 600 Level (Table 1). Most (92.3%) of the students lived on campus.

Socio-demographic variable	n (%)
Sex	
Male	134 (51.5%)
Female	126 (48.5%)

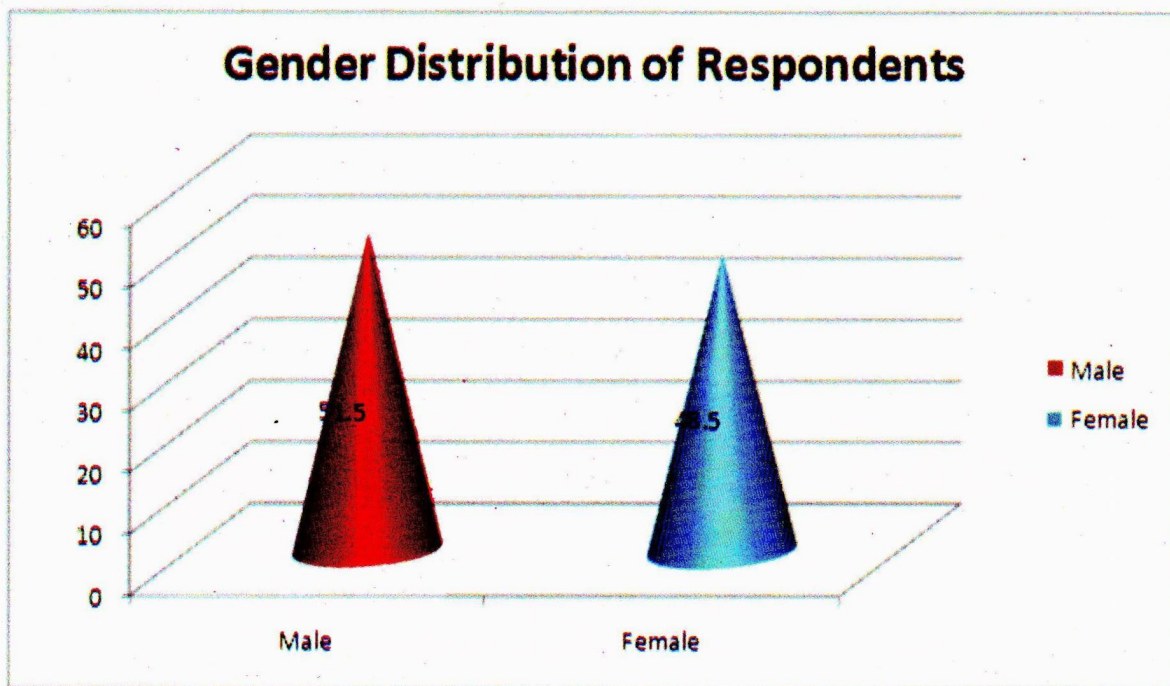


Figure : Gender Distribution of Respondents

Table : Socio-demographic characteristics of respondents

Age (years)	Male n (%)	Female n (%)	Total n (%)
16- 20	36	34	70 (26.9)
21 - 25	56	47	103 (39.6)
26 - 30	32	34	66 (25.4)
31 – 35	4	7	11 (4.2)
≥36	2	0	2 (0.8)
No response	4	4	8 (3.1)
Total			260 (100.0)
Level			
100	25	22	47 (18.1)
200	37	23	60 (23.1)
300	21	27	48 (18.5)
400	19	25	44 (16.9)
500	11	3	14 (5.4)
600	3	3	6 (2.3)
700	6	19	25 (9.6)
No response	2	14	16 (6.2)
Total			260 (100.0)
Hostel			
On Campus	129 (49.6)	111 (42.7)	240 (92.3)
Off Campus	5 (1.9)	15 (5.8)	20 (7.7)
Total			

Knowledge of HIV-AIDS

As shown in table 2 below, most (94.6%) of the respondents had good knowledge of HIV and AIDS. Comparison between the 2 groups revealed that more than half (52.8%) of the respondents that had good knowledge were male students while less than half (47.2%) of the respondents that had good knowledge were the female students; however, more female students (71.4%) had poor knowledge when compared with the proportion of male students (28.6%) that had poor knowledge. Chi-square analysis revealed no significant difference between the male and the female students.

Knowledge of HIV-AIDS	Good n (%)	Poor n (%)	Total	X ²	P-value
Male	130 (52.8)	4 (28.6)	134 (51.5)	3.125	0.07
Female	116 (47.2)	10 (71.4)	126 (48.5)		
Total	246 (94.6)	14 (5.4)	260 (100.0)		

THE CHART SHOWING THE KNOWLEDGE OF RESPONDENTS ON HIV AND AIDS

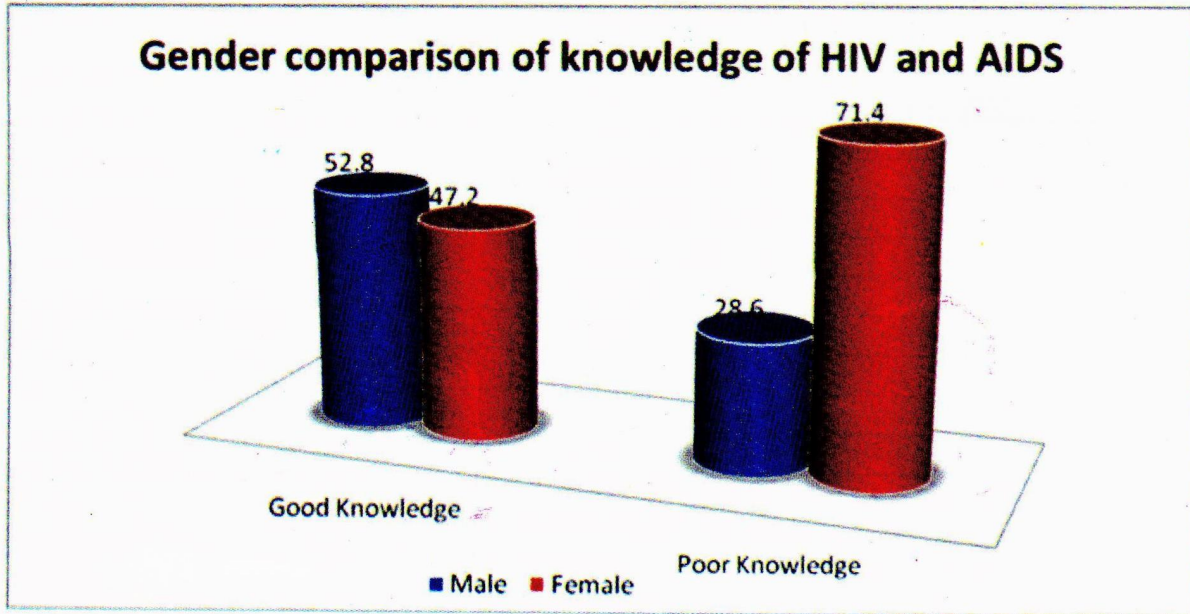


Figure 2: Comparison of knowledge

Attitude towards PLWHA

As shown in table 3 below, most (83.5%) of the respondents had good attitude towards PLWHA. The result from the two groups showed that more than half (52.5%) of the respondents that had good attitude towards PLWHA were male students while less than half (47.5%) of they respondents that had good attitude were female students. On the contrary, more than half (53.55) of the respondents that had poor attitude towards PLWHA were female students, compared to the proportion of male students (46.5%) that had poor attitude. There was no significant difference between the male and the female students.

Table 3 : Respondents' attitudes towards PLWHA

Attitudes towards PLWHA	Good n (%)	Poor n (%)	Total	X2	P-value
Male	114 (52.5)	20 (46.5)	134 (51.5)	0.5212	0.47
Female	103 (47.5)	23 (53.5)	126 (48.5)		
Total	217 (83.5)	43 (16.5)	260 (100.0)		

CHART SHOWING THE RESPONDENTS' ATTITUDE TOWARDS PLWHA

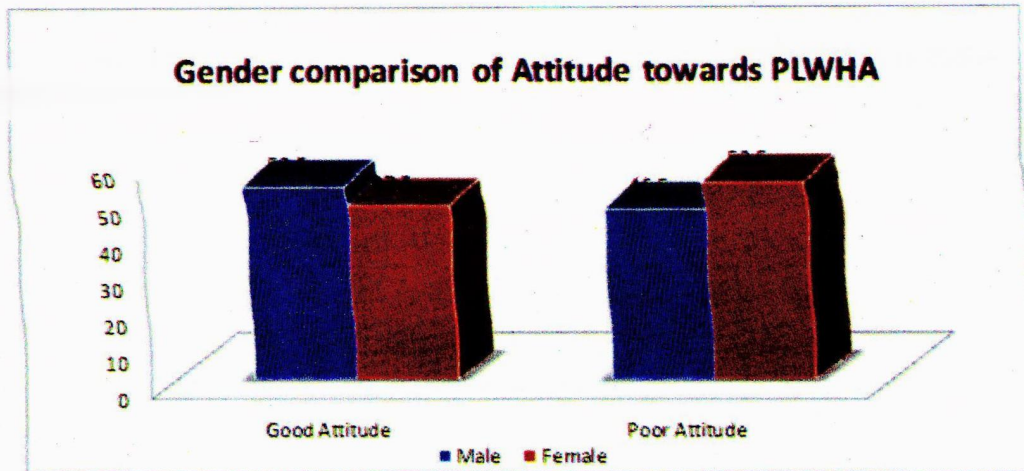


Figure 3 : Attitudes towards PLHWA

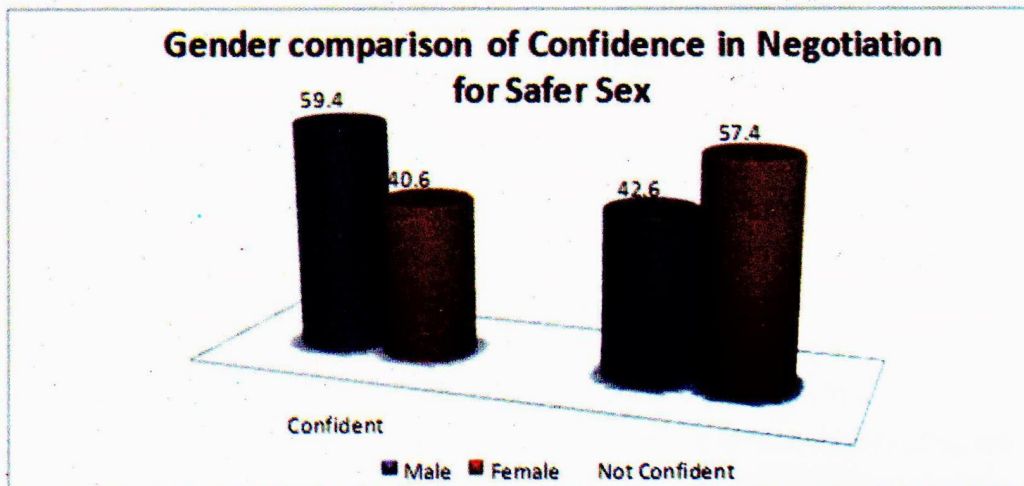
Confidence in negotiating safer sex

In table 4 below, more than half of the respondents that had confidence in negotiation for safer sex were male students (59.4%), while less than half (40.6%) of the female students had confidence in negotiating for safer sex. There was a significant difference between the male and the female students.

Table 4: Respondents' confidence in negotiation for safer sex

Safe sex negotiation	Confident n (%)	Not confident n (%)	Total	X2	P-value
Male	82 (59.4)	52 (42.6)	134 (51.5)	7.3151	0.00
Female	56 (40.6)	70 (57.4)	126 (48.5)		
Total	138 (53.1)	122 (46.9)	260 (100.0)		

CHART SHOWING THE RESPONDENTS CONFIDENCE IN NEGOTIATION FOR SAFER SEX



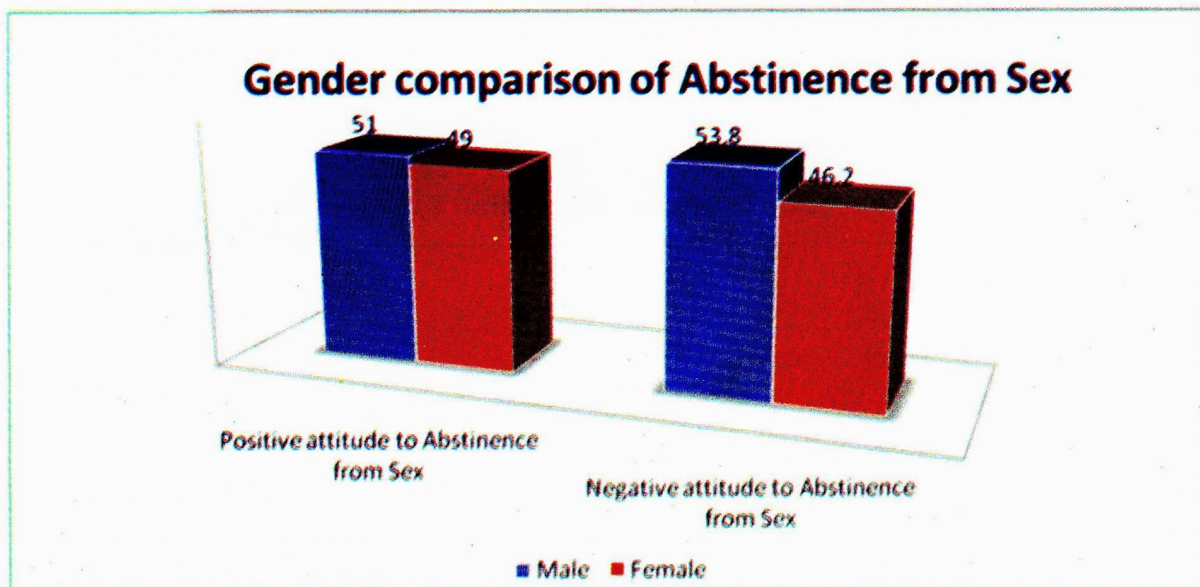
Abstinence

As shown in table 5, more male students (51.0%) had positive disposition towards practicing abstinence. Similarly, more male students (53.8%) had negative disposition towards practicing abstinence. There was no significant difference between the male and the female students.

Table 5: Respondents' response to abstinence from sex

Abstinence	Positive n (%)	Negative n (%)	Total	X2	P-value
Male	106 (51.0)	28 (53.8)	134 (51.5)	0.1386	0.71
Female	102 (49.0)	24 (46.2)	126 (48.5)		
Total	208 (80.0)	52 (20.0)	260 (100.0)		

CHART SHOWING THE RESPONDENTS' RESPONSE TO ABSTINENCE FROM SEX



Discussions

Socio-demographic

The result of this study revealed that most of the respondents are young persons within the age bracket 16-24 years. This is consistent with the findings of studies carried out among University students⁵. There were more male students compared to the female students, though they were given equal chances of participation, reasons for this is not exactly known, but this may call for strategies to improve female students' participation in research. Though, the proportion of respondents living off campus is small (7.7%), yet, female students are responsible for 5.8% of the total proportion of off-campus residents. This has

an implication on sexual health of the female students as there are evidences that co-habiting is common among off-campus residents^(6,8)

Knowledge of HIV and AIDS

The respondents of this study demonstrated good knowledge of HIV and AIDS; however more male students demonstrated good knowledge compared to the female students. This trend is similar to the findings of Aluede et al. (2005) in their study conducted among students of Niger Delta University, Wilberforce Island, Nigeria⁹. Recent update reports have also shown that the percentage of young people (15–24 years) demonstrating comprehensive and accurate understanding of HIV in sub-Saharan Africa has risen by five percentage points for men and by three for women from 2002 to 2011. Being in-school adolescents good have contributed to this good knowledge because comprehensive knowledge on HIV-AIDS is still low among sub-Saharan youths (36% for young men and 28% for young women) and Nigerian youth (34% for young men and 24% for young women⁷. The females have lower knowledge compared to the males in these studies. Female tertiary students have also been documented to have poorer knowledge of HIV-AIDS compared to the male tertiary students in Yemeni¹⁰.

On the other hand, the findings of Chng et al. (2005) among students of selected universities in the South Western part of Nigeria revealed that female students had better knowledge of HIV and AIDS¹¹; study by Asante (2013) among Ghanaian tertiary students also proved that female students had better knowledge of HIV and AIDS compared to their male counterpart¹².

However, in the study of Durojaye (2011) among tertiary education students in Lagos, Nigeria, no significant difference was found in the knowledge of HIV and AIDS between the male and the female students. This shows a need for strategies to improve knowledge of the female students and women at large¹³.

Attitudes towards PLWHA

The attitude of these tertiary students towards PLWHA was quite good compared to the findings for the general Nigerians as documented by NDHS report of 2013, as only 12% of women and 13% of men were documented to have good attitudes towards PLWHA⁷. This attitude is commendable and contrary to the findings among Yemeni tertiary students' attitude towards PLWHA where most of them had poor attitudes towards PLWHA¹⁰. This positive attitude was however similar to the findings among medical students in both private and public schools of Malaysia¹⁴. Comprehensive knowledge of HIV-AIDS and living in urban settings has been found to be positive predictors of good attitudes towards

PLWHA^(10,7); this could be part of the explanation for the **observed positive attitude**. Similar to results of community based studies, the males that had **good attitudes towards PLWHA** outnumbered the females. However, this is contrary to the **findings among tertiary students in Yemeni and Finland** where the female students had **better attitude towards PLWHA** compared to their male counterpart^(10,15). Reasons for this are **not quite known** and there is a need for further research on this.

Confidence to negotiate safer sex

Studies have confirmed that both male and female students in tertiary institutions are involved in risky sexual activities^(5,16). Some of these risky behaviour include: early sexual debut, multiple sex partners, non use or inconsistent use of condom, use of substance prior to sex, unplanned pregnancy, back street abortion, sexual coercion (rape inclusive), transactional sex and even intercourse with a partner known for a day^(5,7). Overall evidence showed that most sexual risk behaviour among university and college students are acquired through the period of campus life. This is evidenced in the study of Durojaye O.C 2011. among tertiary education students in Lagos, revealed that only 16.9% and 39% had used a condom during their first and last sexual encounters respectively, while only 34.3% had used it consistently¹³. A study by Olley and Rotimi (2003) involving both male and female students of the University of Ibadan further revealed that 30% of males compared to 11% of females did not use a condom at last sex¹⁶.

This risky behaviour affects the females psychologically, physically and health-wise among other things. These underscore the importance of negotiating for safer sex especially for women. However, the findings of this study revealed that only 40.6% of the female students compared to 59.4% of the male students had confidence in negotiating for safer sex. This trend is similar to the findings of NDHS 2013 where 46% of young Nigerian women compared with 68% young Nigerian men know where to obtain a condom.

Abstinence

The result of this study revealed that gender was not significantly associated with sexual abstinence among these university students. However, more male students were favourably disposed towards practicing sexual abstinence compared to the female students. This is however surprising because most studies among tertiary students have consistently revealed that higher proportions of male university students were sexually active than female students¹⁷. In a study among South Ethiopia University students, female students were shown to be 3.7 (95% CI 3.1, 4.4) times more likely to start their first sexual intercourse after joining university than male students and larger proportion of these female

students (40.8%) practised their first sex during the third year compared with 34.0% who had it during the first year. Furthermore, focus group discussants of this study added that most students perceive sexual initiation at campus as the most enjoyable part of university life¹⁸.

Willingness to practice abstinence has been shown to be greatly influenced by external factors such as parental opinions on sex and friends' sexual behaviours. For the female students involved in this study, friends' opinion on sexual abstinence are more likely to influence their attitude towards abstinence compared to other factors. Friends in this context may likely be their boyfriends, because if more male students are sexually active, as shown by many studies, they are more often than not being sexually involved with the female students. Most girls usually want to retain their relationship with the opposite sex, and this might pose a challenge to their attitude towards abstinence. This might partly explain the result of this study. Research also indicated that fears about pregnancy and sexually transmitted diseases (STDs) were least likely to influence sexual abstinence.

CONCLUSION

There was no statistical difference in the knowledge, attitude towards PLWHA and abstinence between the male and female students of the University of Ibadan. However, the male students were significantly more confident in negotiating for safer sex when compared to the female students. Strategies to improve the knowledge, attitude and confidence to negotiate safer sex are recommended.

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