The relationship between knowledge of HIV/AIDS and sexual behaviour among care workers (HCWs) in General Hospital Ogoja

by
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Declaration

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Abstract

Nigeria has the second highest disease burden of HIV/AIDS in sub Saharan Africa after South Africa with adult HIV prevalence of 4.1%, with an estimated 3,130 million people living with HIV (Male-1,320,000: Female-1,820,000-2010) (FMOH, 2010). The HIV epidemic in Cross River state is 7.1% in 2010; and ranks as the 9th highest in the country.

General Hospital Ogoja is one of the secondary level hospitals in Cross River State of Nigeria that offers Comprehensive HIV/AIDS services. Although the prevalence of HIV is very high in Cross River state (7%) that of General Hospital is not readily known. The uptake of HIV Counseling and Testing (HCT) among health care workers is relatively low, despite the fact that the awareness of HIV and AIDS in Nigeria by adult population is said to be generally very high (93.8%).The use of condom in the last sex act was low (16%) despite the fact that sexual transmission is the predominant mode of HIV spread in Nigeria (NARHS 2007)

To determine whether the knowledge health care workers in GH Ogoja have about HIV/AIDS affect their sexual behavior; a quantitative approach of research design was used through a questionnaire

A total of one hundred and thirty questionnaires were distributed and all were returned. There were few abstentions on some of the questions possibly due to its private nature but generally the overall responses were devoid of inconsistencies and the response rate was well over 98%.

The findings from the study showed that greater that 90% of the respondents are quite knowledgeable with the cause of HIV, modes of transmission and prevention of HIV. While the respondents exhibit a high knowledge with respect to modes of transmission through sexual intercourse(96.8%); their knowledge with respect to safer sex practices with use of condom in penetrative sex calls for further review. It would be expected that 100% of all respondent will be fully abreast with information on the modes of transmission of HIV and its prevention.

Condom use in stable relationship connotes different meanings to the respondents. While 109 (85.2%) of the 128 respondents agreed to the use of condom among couples when the status of one of their partner is unknown. The response to the question on whether the use of condom affects sexual relationship portrays an interesting finding. 71 (55.4%) of the total respondents disagreed with the fact that condom use affect sexual relationship while 42 (32.8%) respondents

agreed. It may not be out of place to assume that a lot of HCWs may not be condomizing effectively based on the impression that condom use during sex affect sexual relationship.

Health care workers live and interact freely with other members of the society and are potential bridging group for disseminating HIV into the larger population. The finding from GH Ogoja portrays the fact that though the knowledge of HIV among them is very high their full application of the knowledge with respect to sexual behavioural change is still doubtful. A more qualitative study like focus group discussion will assist in unraveling this observation.

Opsomming

Nigerië het die tweede grootste voorkoms van MIV in Afrika suid van die Sahara. ‘n Beraamde 3, 130 miljoen mense leef na beraming met MIV en die voorkoms in die Cross River Staat van die land was 7.1 % in 2010; die negende grootste voorkoms in die land.

Die doel van die studie was die bepalin van die kennisvlakke van werkers in die Algemene Hospitaal van Ogoda en ‘n kwantitatiewe benadering en navorsingsontwerp is vir die studie gebruik.

‘n Totaal van 130 vraelyste is geadministreer en ongeveer 90% s terug ontvang.

Bevindings van die studie het aangetoon dat meer as 90% van die respondente ‘n bevredigende kennis van MIV het en dat hulle ook goed ingelig is oor die wyses waarop die epidemie versprei word en die metodes waarvolgens verspreiding van die epidemie beperk kan word.

Die sata van die studie word verder ontleed en meer spesifiekebevindings word gerapporteer.

Aabeveling vir die beter opleiding van werkers by die Ogoda Hospitaal word gemaak en voorstelle vir verdere studies word ook gemaak.

Acknowledgements

I want to acknowledge the wonderful support of my loving wife, Bibian Okezie-Onyedinachi, whose doggedness both financially and spiritually ensure that I completed this program. I will always remain grateful to my colleagues Frank, Jonathan and Ajibola for all their technical assistance. My sincere gratitude to my great mentor and supervisor, Prof. Augustyn who has always being there for me right from my PDM days. I will always remain his role student.

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Chapter1. Introduction

Epidemiology of HIV and AIDS

Globally, the pandemic of HIV and AIDS has continued to constitute serious health and socio-economic challenges for more than three decades. In underdeveloped and developing countries, it has reversed many of the health and developmental gains over the past three decades as reflected by indices such as life expectancy at birth and infant mortality rate among others. The epidemic has also facilitated the re-emergence of disease conditions such as pulmonary tuberculosis and other opportunistic infections. As at the end of 2009, about 33.3 million persons were estimated to be infected with HIV globally. Of these, 22.5 million (i.e. 68% of the global total) were in Sub-Saharan Africa, and about 3,130,000 million in Nigeria. Thus, Nigeria has the second highest number of people living with HIV in the world after South Africa (UNAIDS, 2010).

Nigeria is the most populous country in sub-Saharan Africa with a land mass area of 923,768 square kilometers. It is estimated to have a population of over 140million according to 2006 National population census with approximately two thirds of the people living in the rural areas (NARHS, 2007). According to the 2003 Nigeria Demographic and Health survey, the total fertility rate is very high at about 5-7%. One of the major reasons adduced for this is the pro-natalistic attitude of the population and the low use of contraceptive methods. Nigeria has a greater number of younger people than older people; Sixty One percent of the total population is under 25 years of age while 4 percent is 65 or older (NDHS 2008).

Nigeria has the second highest disease burden of HIV/AIDS in sub Saharan Africa after South Africa with adult HIV prevalence of 4.1%, with an estimated 3,130,000 million people living with HIV (Male-1,320,000: Female-1,820,000-2010) (FMOH, 2010).

Presently the epidemic can be said to be stabilizing between 2005 and 2010 as shown by national prevalences of 4.4% in 2005, 4.6% in 2008 and 4.1% in 2010. Females continue to be the most affected with adult life expectancy in Nigeria at birth which increased from 45 years in 1963 to 51 years in 1991 mainly due to improved living conditions and better health services dropping to 46.5 years by2005 (UNDP HDR 2007/8) and currently 48.4 years (UNDP HDR, 2010).

The reduction in life expectancy has been partly attributed to the effects of the HIV and AIDS epidemics on the population (FMOH, 2010).

The HIV Sentinel Surveillance in 2003 by site shows that Cross River State has the highest prevalence of 12.0% (Adeyi et al, 2006). The epidemic in the state has gone down to slightly below 10% in 2008 and 7.1% in 2010; however the state still ranks as the 9th highest in the country.

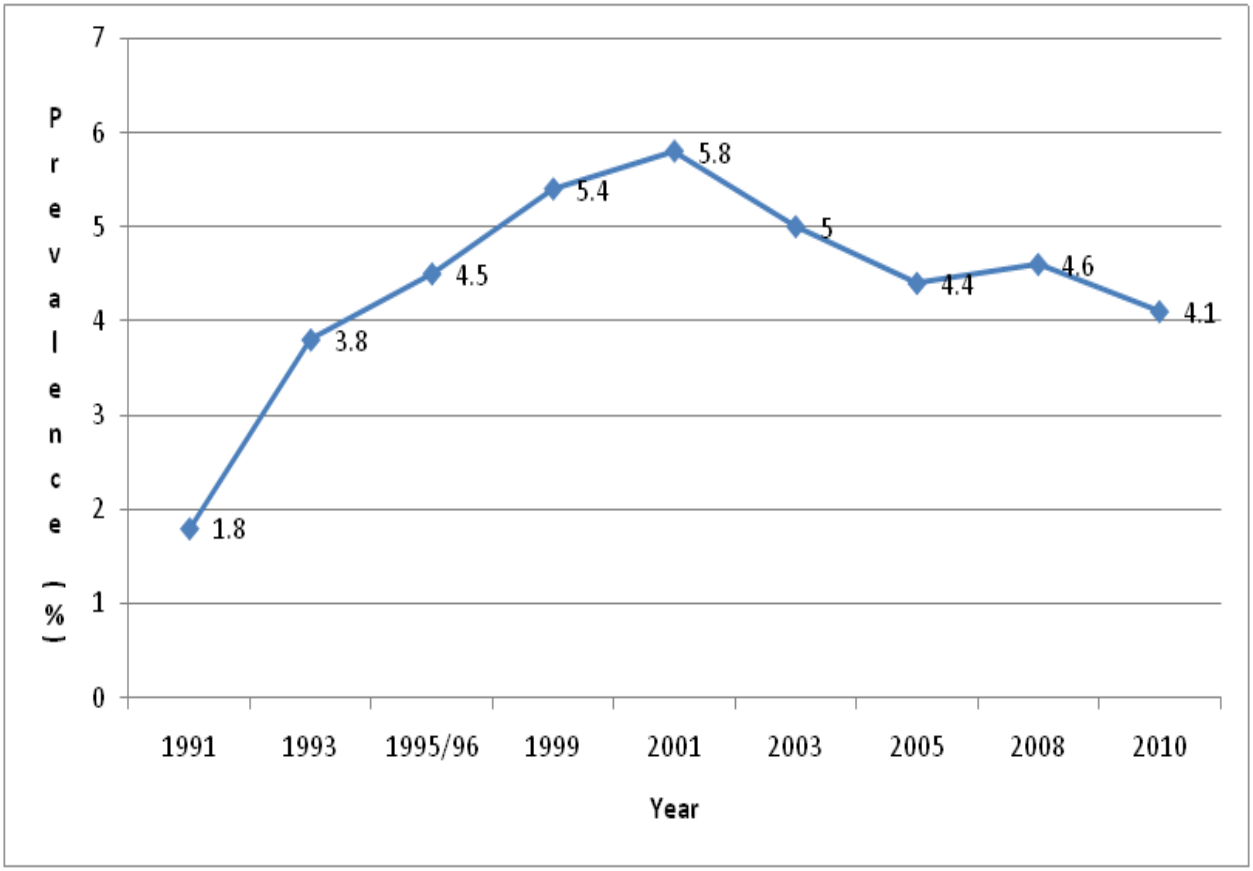

Figure 1.1 **National HIV Prevalence Trend from 1991-2010 (HSS 2010)**

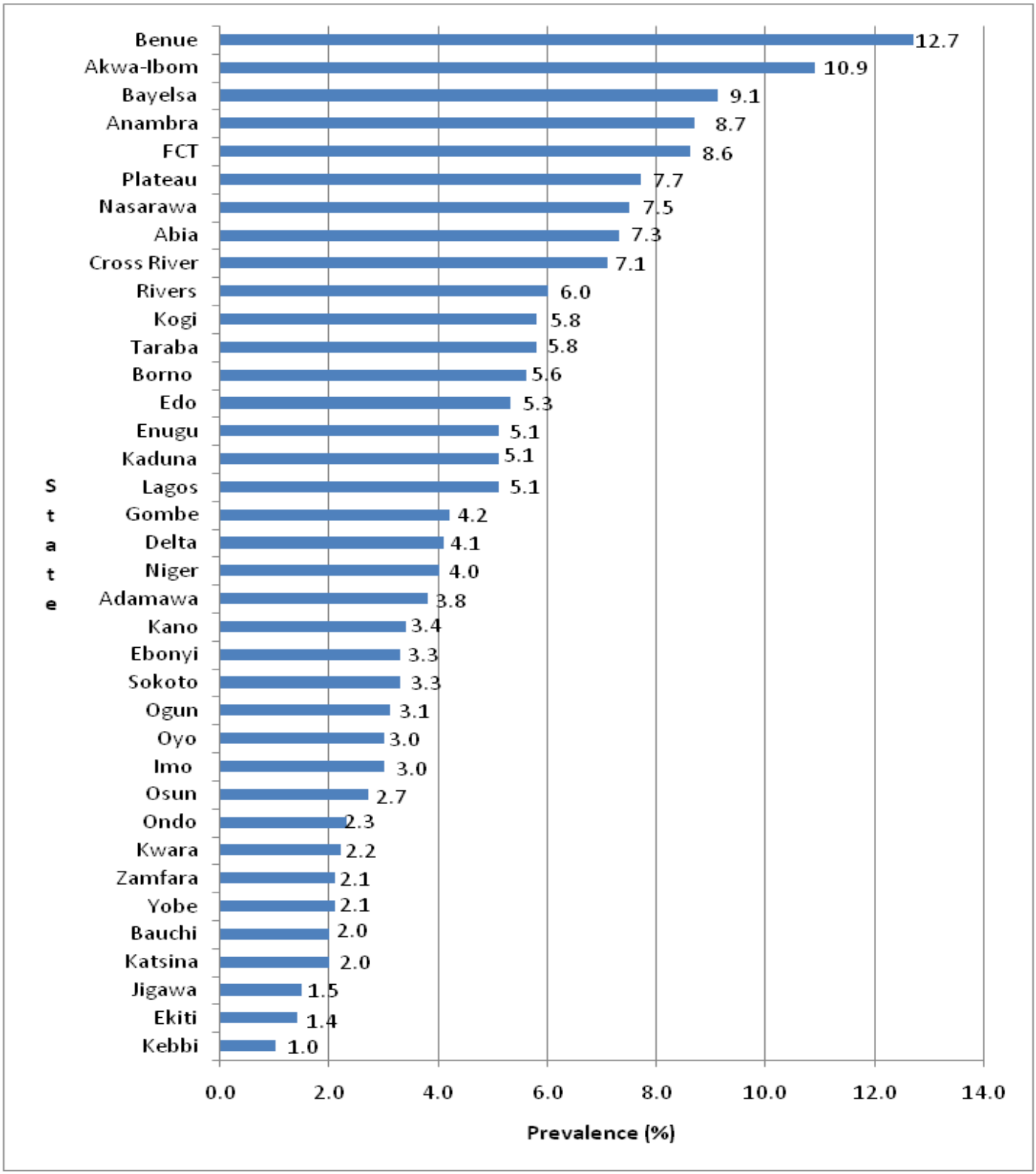

Figure 1.2 HIV **Prevalence by State (HSS 2010)**

In Nigeria, heterosexual route of infection accounts for 82% of overall transmission rates with studies in Africa showing that men are more likely to have multiple sexual partners than women who might contribute to HIV infections dynamics in heterosexual population (Adeyi et al, 2006). The main drivers of the epidemic among others include low risk perception, high risk sexual behaviors and multiple concurrent sexual relationships among others (NACA, 2008).

Other studies from southern African region has also led credence to the fact that the major driver of this epidemic is concurrent sexual partnership by men and women, with insufficient, consistent, correct use of condom (both male and female), combine with low levels of male circumcision (Haperin &Epstein, 2007).

It has been well recognized that Sexually Transmitted Infections (STIs) prevalence rates are generally high in Africa and this can be attributable to casual attitudes towards sex and tendencies towards multiple sex partners in some African communities, as well as lack of easily available treatment for STIs.

WHO study shows that in a country like Lesotho 55% of men reported having two or more regular ongoing (lasting at least a year) sexual partnership within one year, while 39% of women have two or more regular partnership in the previous year and I believe the situation in Nigeria will be no less different. The 2003 National HIV/AIDS Reproductive Health Survey (NARHS) found that many Nigerians contact STIs during their sexually active years and engage in multiple partner sex. In order to determine truly the actual drivers of HIV/AIDS in the communities, we need to understand patterns of sexual behaviours and partner exchange. This information will be vital in determining how intervention strategies may be adapted to reduce the further spread of HIV and other STIs and mitigate the impact of HIV epidemic on the individual healthcare worker and the entire health sector community.

Chapter 2 Literature Review

Health care workers are faced with a lot of occupational risks in the course of their daily activities. Of some of the risks reported particularly in the areas of HIV/AIDS most are usually tied to the issue of post exposure prophylaxis as the major source of acquiring HIV/AIDS among health care workers. According to the World Bank (1999), health professionals are high risk individuals and face the same HIV/AIDS risk as the general population.

An attempt to evaluate sexual risk taking and HIV testing among health workers was carried out in Zambia (Kiragu et al, 2006). Their findings were that health care professionals particularly females are less likely to trust or use condoms even in high risk sexual relationship. They opined that health care workers are subject to similar risks of HIV/AIDS as the general population; their main source of infection is thought to be sexual transmission and occupational exposure- while the later may be less significant. Even though they may be somehow privileged group, they are products of the community which they reside. They are women and men first and as such experience the same cultural values as clients which they are expected to counsel and treat. Studies in Colombia have shown that although it is expected that health care workers should have better knowledge and attitudes on the prevention of STDs/HIV/AIDS, the contrary seems to be the case. They are actually putting themselves and their couples at risk because of their sexual behavior (Perea et al, 1998).

While it is expected that knowledge to some extent should translate to some levels of behavioural change particularly as it relates to health care workers. Studies in Kenya have shown that as it relates to Africans or sub- Saharan African countries western model of health education are ineffective. The population still does not have adequate knowledge of safe sex and much as there may be some level of behavioural change, HCWs are still at risk of HIV infection (Bowman et al, 1992). This is buttress by the recent study on the Sexual practices and the knowledge about HIV/AIDS among outpatients at Tenwek Mission Hospital in Bomet district of Kenya; which confirmed that risky sexual practices are still common in the society despite awareness that this is the greatest contributor to the spread of HIV/AIDS and HCWs are not exempted . If not why are there still new incidence of infection found among them and the

society at large. Their conclusion s that there is need to reinforce programs geared towards HIV/AIDS primary prevention (The ABCD approach) (Amisi, 2009).

Some authors believe that knowledge does not necessarily translate into behavioural change. In a research work carried out in South Africa to determine the effectiveness of a workplace HIV/AIDS health promotion programme derived from the Health Belief Model; it was shown that positive health beliefs does not translate to positive health behavior (Tlou & Augustyn,2009). This was also echoed by a study conducted among rural adult population in south west Nigeria on sexual risk behaviours and risk perception of HIV/AIDS (Olarinmoye et al, 2009). While health care workers may not be regarded technically speaking as high risk people; it is not out of place based on World Bank (1999) observation that they should be treated as such. Relevant studies applicable to high risk professionals may have some bearing on issues pertaining to their sexual behaviour and knowledge of HIV/AIDS. The fact still remains that some HCWs still engage in casual high risk sex and are mainly involve in stable relationship of co-habitation and marital union where the fidelity of their partners cannot be guaranteed.

High risk professionals like uniform men has been shown to be participating in high risk sexual behavior which may increase their risk of acquiring and spreading HIV to their spouse and partners (Nwokoji & Ajuwon, 2004). The issue of sexual behavior among health care workers goes beyond the knowledge they have concerning HIV/AIDS (Ntozi et al, 2003) and should elicit further research to ensure a holistic approach. The ABCD (Abstain, Be faithful, Condom use and Diagnosis-Know your status) strategy is one such approach. Despite preventive measures already in place, new infections still occur, indicating the need to reinforce primary prevention programs. The findings of a behavioural surveillance study conducted in Nigeria in 2005, tends to buttress this fact. It showed that while the awareness level of HIV and other STIs were very high, real knowledge based on the use of UNAIDS HIV indicators was still quite low (FMOH,2005). Accurate knowledge is necessary and foundational for appropriate health behaviour even though it is not necessarily predictive of behavioral changes.

This study will help to identify some of the gaps between knowledge of HIV and prevention of HIV infection among health care workers through sexual behavior modification.

Chapter 3. Research design

General Hospital Ogoja is one of the secondary level hospitals in Cross River State of Nigeria that offers Comprehensive HIV/AIDS services. Cross River state is situated in south - south region of Nigeria; with Ogoja located in the northern part of the state. The hospital was established in 1915 and has 105 beds with a bed occupancy rate of less than or equal to 70% and 40% of them HIV/AIDS related cases. The hospital have a staff strength of 240 health care workers of which consist of 5 medical doctors and 122 professional nurses mainly locals and other allied health professionals who are mainly locals (CRS HMB,2008).

The majority of the staff strength consist of females possibly due to the nature of the business undertaken which is health and social welfare services. Although the prevalence of HIV is very high in Cross River state that of General Hospital is not readily known. It is generally believe that there is a high prevalence of HIV/AIDS among health care workers in Ogoja as the hospital has recorded quite a number of AIDS related deaths among its workforce particularly among the female staff members. The uptake of HIV Counseling and Testing (HCT) among health care workers is relatively low, despite the fact that the awareness of HIV and AIDS in Nigeria by adult population is said to be generally very high (93.8%). The correct knowledge of all the routes of HIV transmission and two methods of prevention have remained low (54% and 52.5% respectively).Furthermore, the use of condom in the last sex act was low (16%) despite the fact that sexual transmission is the predominant mode of HIV spread in Nigeria (NARHS 2007)

Table 3.1 General Hospital Ogoja's human resource details (staff strength)

S/N	Cader	Male	Female	Total
	Administration	3	4	7
	Transport	3	-	3
	Finance/Supplies	3	3	6
	Labourers	4	-	4
	Security	5	-	5
	Artisans	3	-	3
	Medical Doctors	5	-	5
	Pharmacist Technicians Attendants	1 2 1	- 3 1	 9
	Dental technicians	3	-	3
	Medical Records	2	11	23
	Medical Lab chief Technicians Assistants	1 7 2	4	13
	Radiographers	10	10	20
	Anaesthetics	3	-	3
	Nursing Department	37	85	122
	Orderlies'	4	21	25
	Total	**99**	**144**	**240**

It may seem simplistic to expect people to change their sexual behaviour once they learn how dangerous it is to have multiple concurrent partnerships in areas of high prevalence like in Cross-River State and worst still among health care workers who are supposedly expected to be knowledgeable about HIV and AIDS. The usually observed cases of Sexually Transmitted Infections (STIs) including HIV among health care workers at out-patient department leaves one

to wonder why it should be so. According to the World Bank (1999), health professionals are high risk individuals and face the same HIV/AIDS risk as the general population.

Majority of HIV infection among HCWs have been shown to be acquired through sexual means and it is imperative that emphasis should be placed on this group because they are part of the society where they live and interact; they are also prone to frequent transfers to distant areas away from their families and partners which also make them vulnerable. At present in GH Ogoja there is no HIV/AIDS workplace policy but a quasi treatment policy in form of Post Exposure Prophylaxis (PEP) is been made available to all staff. It is in the light of the above, that the researcher wants to undertake a study to evaluate the actual impact of knowledge of HIV/AIDS on sexual behaviour among health care workers.

Research problems

- We do not know if health care worker knowledge of HIV/AIDS affect their decision to take part in risky sexual behavior or not
- We do not know if the knowledge of HIV/AIDS among health care workers affect their perception of risky sexual behavior

Research question

- Does knowledge of HIV/AIDS affect health care workers sexual behavior or not?

Significance of the Study

Health care workers are believed to be subject to similar risks of HIV/AIDS as the general population. Their main source of infection is thought to be sexual transmission and occupational exposure - while the later may be less significant. Even though they may be somehow privileged group, they are products of the community which they reside. They are men and women first and as such experience the same cultural values as clients which they are expected to counsel and treat. The prevalence of HIV among them may mirror that of the society that the researcher would want to" ask does knowledge of HIV/AIDS affect HCWs sexual behavior or not"?

The significance of the study may reveal that knowledge alone may not be enough. It is of importance to ascertain what knowledge of HIV/AIDS does HCWs have and if it affects their

sexual behavior or not. There has been little previous work done on this group and the nature of their work makes them relevant to issues of HIV/AIDS both in workplace and also in the community. It is also believed that much as the health care workers may show high level of knowledge of HIV/AIDS in areas of transmission, spread of infection and prevention; they might still be involved in risky sexual behaviour.

Aim of the study:

- To determine whether the knowledge health care workers have about HIV/AIDS affect their sexual behavior

Objectives of the:

- To ascertain the level of HIV/AIDS knowledge among health care workers
- To identify sexual behavior health care workers are engaged in
- To identify gaps/weaknesses between available knowledge and sexual behavior among health care workers
- To provide guidelines for health care workers when dealing with issues of knowledge of HIV/AIDS and sexual behavior

Research design and methods

- Paradigm and research design:
  - The researcher will be using a quantitative approach and the research design will be through a questionnaire

Data collection

- Data will be collected using questionnaire design by the researcher. This will be a single tick closed ended question consisting of 30 questions
  - It will be divided into three parts with the first part dealing with demographic data.
  - The second part will consist of data assessing their knowledge of HIV/AIDS
  - The last part will deal with data on their sexual behavior

Data Analysis

- Quantitative: The researcher will count the number of responses and then apply frequency analysis

Chapter 4. Main findings

A total of one hundred and thirty questionnaires were distributed and all were returned. There were few abstentions on some of the questions possibly due to its private nature but generally the overall responses were devoid of inconsistencies and the response rate was well over 98%.

- **Demographic profile and work condition**

  As can be seen in Table 4.1 to Table 4.7 the gender of the majority of the population surveyed consist more of males (54.6%) while females consisting of 45.4%. Majority of the respondents were Nurses (52.6%) consisting of both males and females. This is expected due to the nature of the business of the facility which is primarily health and social welfare services. The population analyzed is still quite young with the average age of 24-35years (32.3%) and majority of them are in marital union (62.5%). In terms of religious affiliations Christians represented 61.5% while the major tribe was Efik which represented 39.5% of the total population. All the respondents were literate with majority of them having acquired a post secondary education (88.9%).

Table 4.1 Gender Distribution

		Frequency	Percent
Valid	male	71	54.6
	Female	59	45.4
	Total	130	100.0

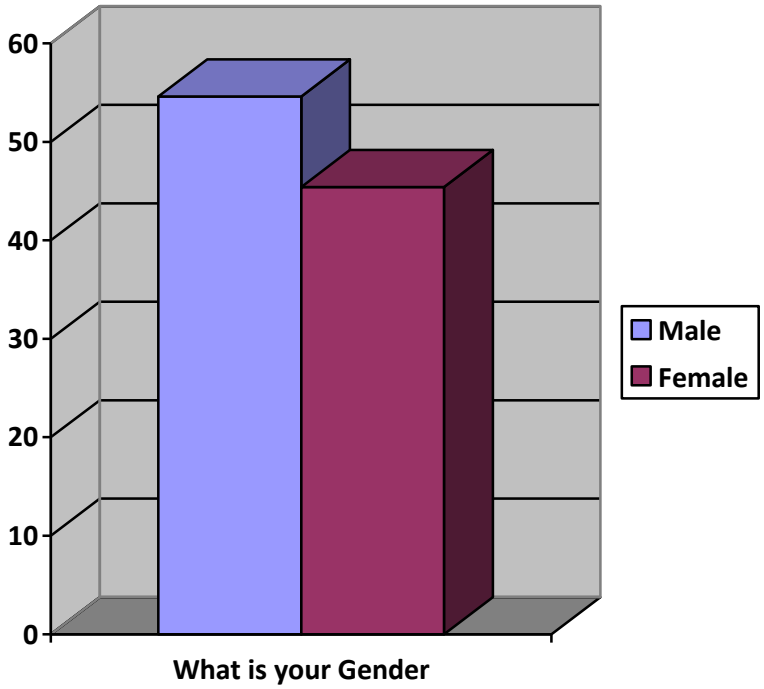

Figure 4.1 Gender distribution

Table 4.2 Age distribution

		Frequency	Percent
Valid	18-24	37	28.5
	25-34	42	32.3
	35-44	30	23.1
	45+	21	16.2
	Total	130	100.0

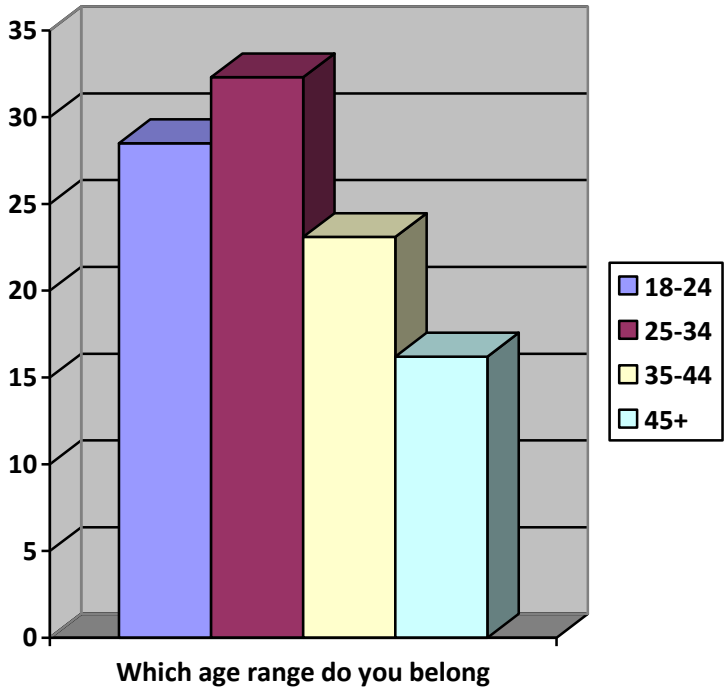

Figure 4.2 Age distribution

Table 4.3 Marital Status distribution

		Frequency	Percent
Valid	Married	80	61.5
	Unmarried	45	34.6
	Other/cohabitation	3	2.3
	Total	128	98.5
Missing	System	2	1.5
Total		130	100.0

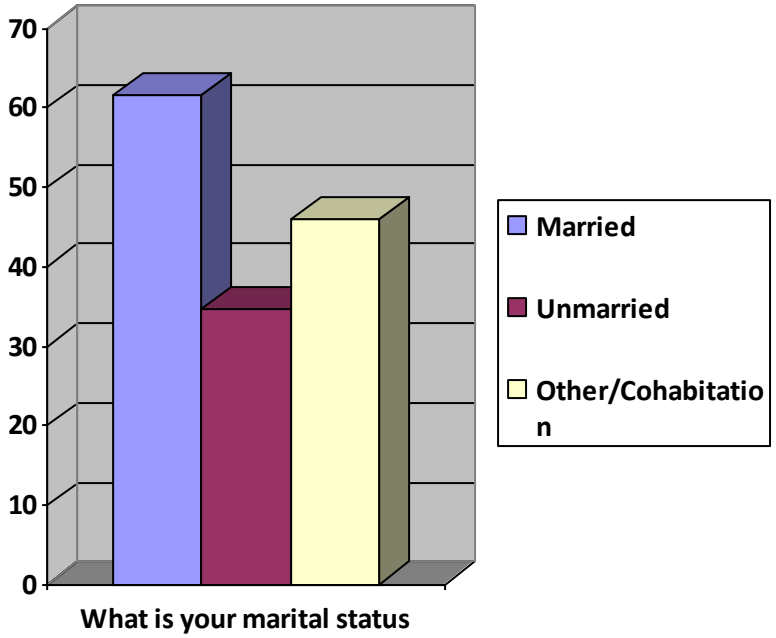

Figure 4.3 Marital status distributions

Table 4.4 Ethnic group distribution

		Frequency	Percent
Valid	Efik	51	39.2
	Ibibio	18	13.8
	Others	60	46.2
	Total	129	99.2
Missing	System	1	.8
Total		130	100.0

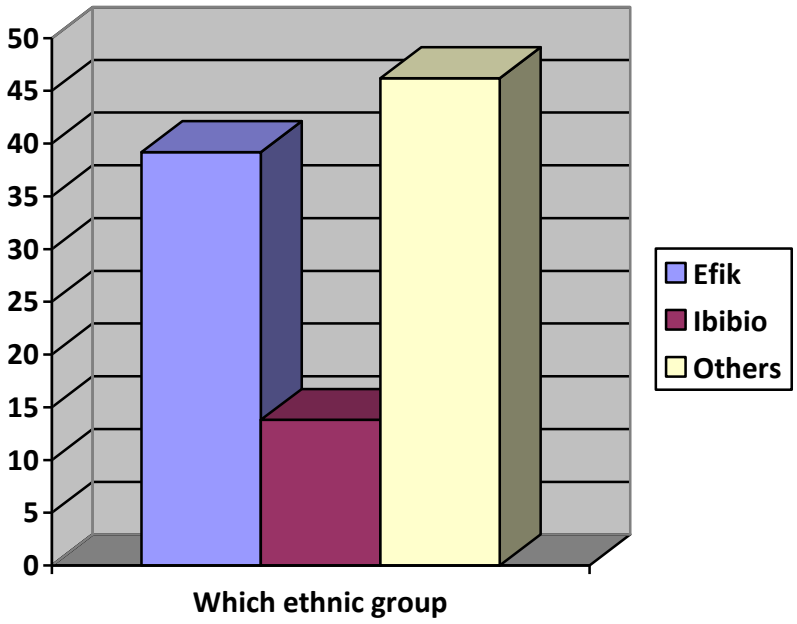

Figure 4.4 Ethnic group distributions

Table 4.5 Religious group distribution

		Frequency	Percent
Valid	Christianity	120	92.3
	Islam	7	5.4
	Others	2	1.5
	Total	129	99.2
Missing	System	1	.8
Total		130	100.0

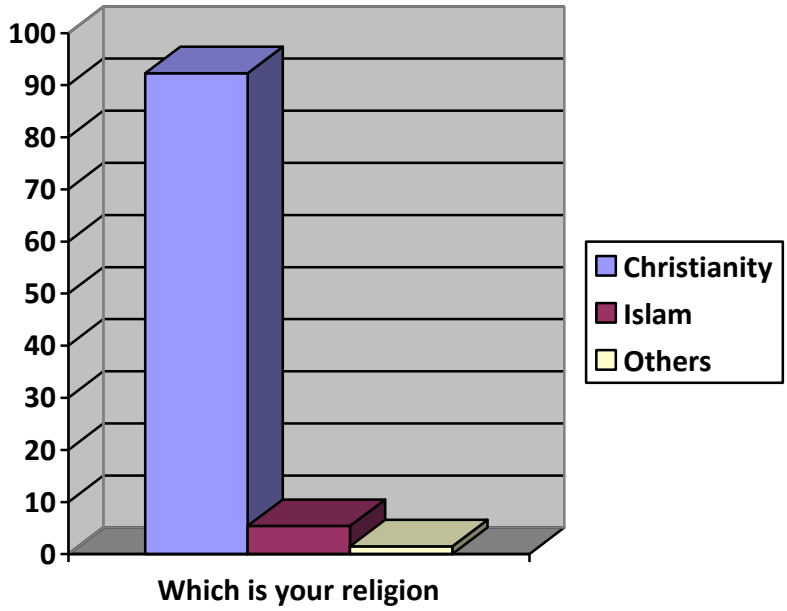

Figure 4.5 Religious group distribution

Table 4.6 Professional cadre distribution

		Frequency	Percent
Valid	Doctor	23	17.7
	Nurse	73	56.2
	Others	32	24.6
	Total	128	98.5
Missing	System	2	1.5
Total		130	100.0

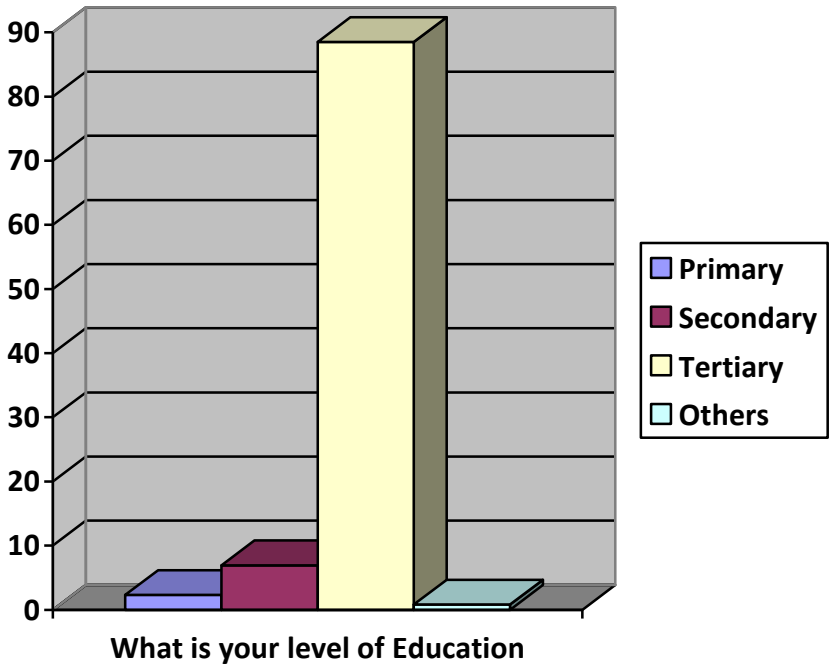

Figure 4.6 Educational level distribution

Knowledge of HIV/AIDS

HIV/AIDS knowledge levels among health care workers were assessed judging by respondents' answers on the cause of AIDS, difference between HIV and AIDS, modes of transmission and prevention of HIV. With regards to the cause of AIDS as shown in Figure 4.7; while a great number of the respondents agree with the fact that HIV is the cause of AIDS (90.1%); there exist a few respondents (6.1%) who still disagree. This observation is very critical; considering the fact that we are in the third decade of the epidemic and huge resources has be committed with respect to prevention messages. It is expected that HCWs as the custodian of this knowledge should express full knowledge, with respect to the knowledge of HIV/AIDS.

Table 4.8 HIV is the cause of AIDS distribution

		Frequency	Percent
Valid	Strongly disagree	6	4.6
	Disagree	2	1.5
	Neither agree nor disagree	1	.8
	Strongly agree	82	63.1
	Agree	39	30.0
	Total	130	100.0

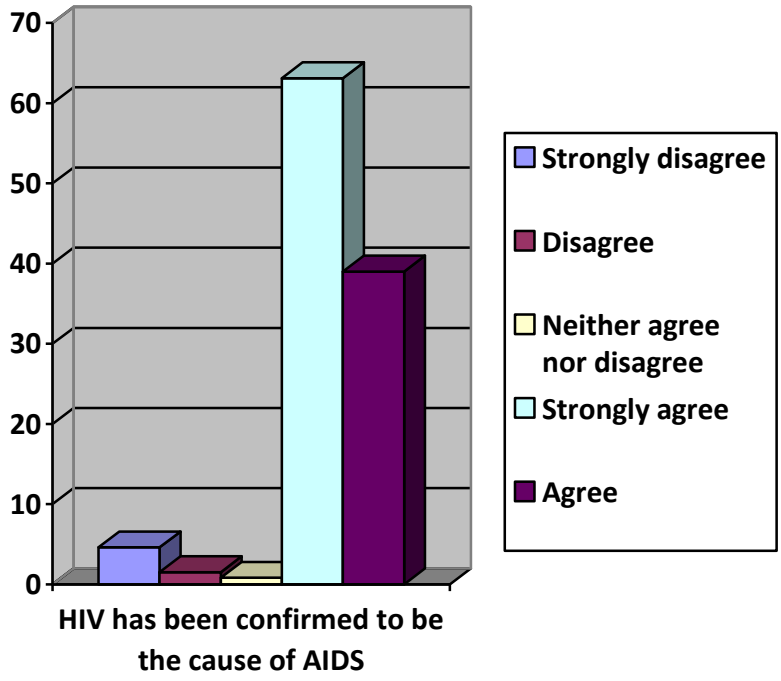

Figure 4.7 HIV is the cause of AIDS distribution

This same pattern is noticeable with respect to the answers of the respondents on the difference between HIV and AIDS; and modes of transmission of HIV. While majority of the health care

workers agree that HIV can be transmitted through blood, semen, vaginal fluid and breast milk (94.6%); some of others do not agree with this notion (5.4%) as reflected in Figure 4.8.

Table 4.9 HIV is transmitted through blood, semen, vaginal fluid and breast

		Frequency	Percent
Valid	Strongly disagree	4	3.1
	Disagree	3	2.3
	Strongly agree	90	69.2
	Agree	33	25.4
	Total	130	100.0

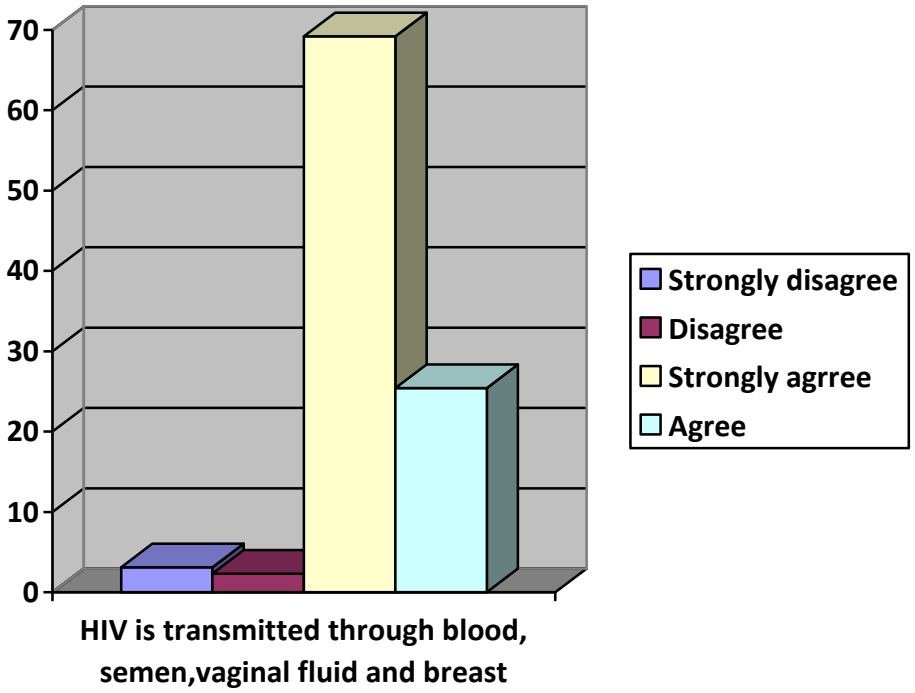

Figure 4.8 Transmission of HIV distribution

Interestingly though, while the respondents exhibit a high knowledge with respect to modes of transmission through sexual intercourse(96.8%); their knowledge with respect to safer sex practices with use of condom in penetrative sex calls for further review. As shown in Figures 4.9 there still exist some respondents who are of the notion that not using condom correctly and regularly will not predispose them to acquiring HIV (3.1%). It would be expected that 100% of all respondent will be fully abreast with information on the modes of transmission of HIV and its prevention. This is also reflected in Figure 4.11 where 4.6% of the respondents agreed to the notion that using withdrawal method or engaging in penetrative anal sex cannot predispose you to acquiring HIV infection. A further analysis of this information is critical towards developing guidelines when dealing with issues of sexual behavior and HIV/AIDS

Table 4.10 Spread of HIV through unprotected sexual intercourse distribution

		Frequency	Percent
Valid	Strongly disagree	3	2.3
	Disagree	1	.8
	Strongly agree	88	67.7
	Agree	38	29.2
	Total	130	100.0

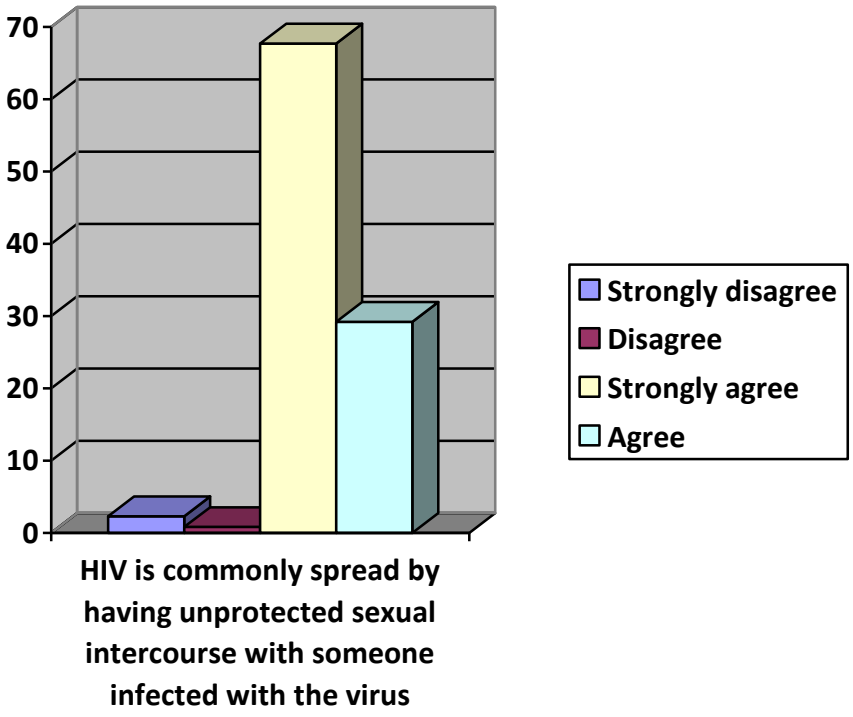

Figure 4.9 Spread of HIV through unprotected sexual intercourse distribution

Table 4.11 Infection with AIDS virus from injection with sterile needle distribution

		Frequency	Percent
Valid	Strongly disagree	66	50.8
	Disagree	50	38.5
	Neither agree nor disagree	2	1.5
	Strongly agree	6	4.6
	Agree	5	3.8
	Total	129	99.2
Missing	System	1	.8
Total		130	100.0

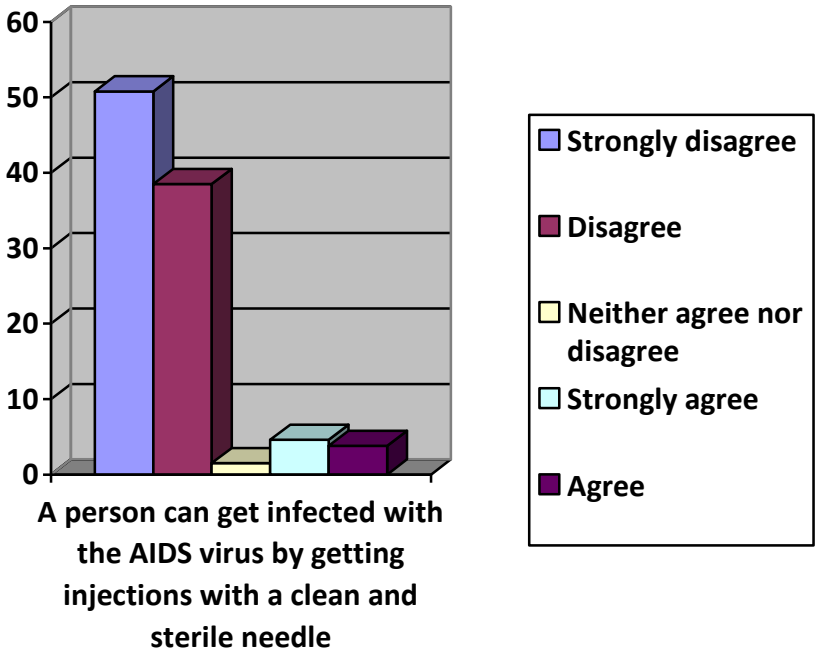

Figure 4.10 Infection with AIDS virus from injection with sterile needle distribution

Table 4.12 Infection with AIDS virus through withdrawal method in penetrative sex distribution

		Frequency	Percent
Valid	Strongly disagree	55	42.3
	Disagree	63	48.5
	neither agree nor disagree	4	3.1
	Strongly agree	2	1.5
	agree	4	3.1
	Total	128	98.5
Missing	System	2	1.5
Total		130	100.0

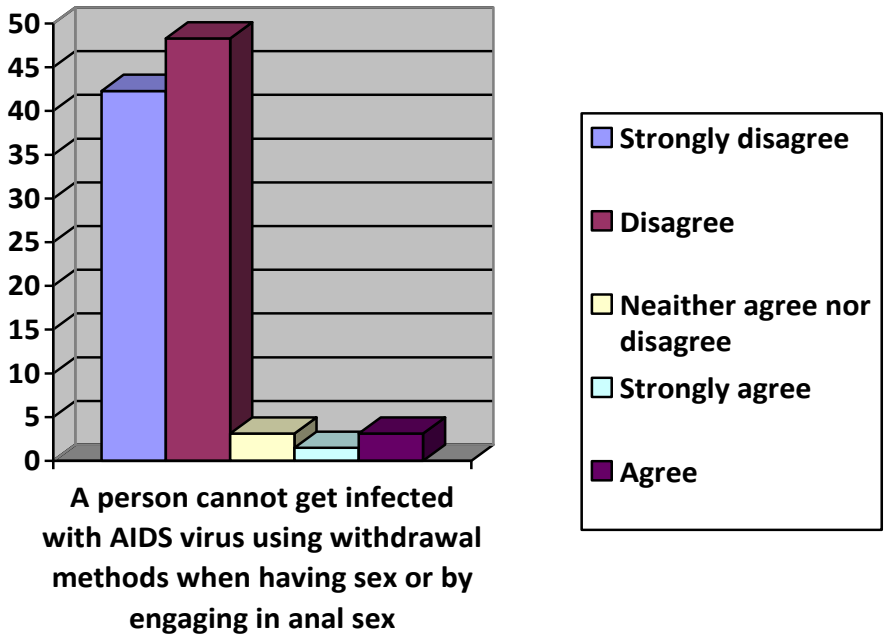

Figure 4.11 Infection with AIDS virus through withdrawal method in penetrative sex distribution

Table 4.13 Protection from AIDS Virus by consistent, correct use of condom distribution

		Frequency	Percent
Valid	Strongly disagree	3	2.3
	Disagree	1	.8
	Neither agree nor disagree	1	.8
	Strongly agree	36	27.7
	Agree	86	66.2
	Total	127	97.7
Missing	System	3	2.3
Total		130	100.0

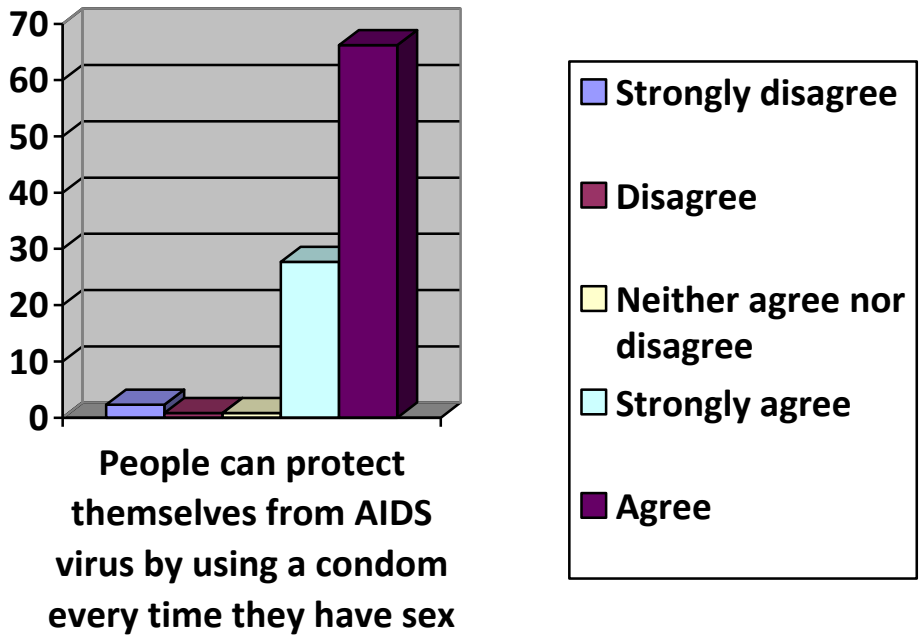

Figure 4.12 Protection from AIDS Virus by consistent, correct use of condom distribution

While it is not in doubt about the knowledge HCWs have about HIV, it becomes imperative to identify the kind of knowledge which they have and what impact it has on their perception of risky sexual behavior. A cross tab was run between the profession of the HCWs and the

knowledge of HIV. The findings were very interesting in the sense that a significant percentage of the nurses still do not agree with the fact that HIV is the cause of AIDS as shown in Figure 4.7. One hundred and twenty eight respondents where assessed of which 73(57%) were nurses, 23 were doctors (18%) and 32 (25%) representing other allied professionals. Of the total of 8 respondents who disagree with the fact that HIV is the cause of AIDS, 6 of them were nurses almost greater 80%.

While this may be termed to be insignificant with respect to the overall number of respondents, a further analysis in form of focus group discussion or other qualitative form of analysis will help throw more light on this finding.

Table 4.14 A cross tab of HIV is the cause of AIDS against professional cadre distribution

			Which is your profession			
			Doctor	Nurse	Others	Total
HIV has been confirmed to be the cause of AIDS	Strongly disagree	Count	0	5	1	6
		% within HIV has been confirmed to be the cause of AIDS	.0%	83.3%	16.7%	100.0%
		% within Which is your profession	.0%	6.8%	3.1%	4.7%
	Disagree	Count	1	1	0	2

		% within HIV has been confirmed to be the cause of AIDS	50.0%	50.0%	.0%	100.0%
		% within Which is your profession	4.3%	1.4%	.0%	1.6%
	Neither agree nor disagree	Count	0	0	1	1
		% within HIV has been confirmed to be the cause of AIDS	.0%	.0%	100.0%	100.0%
		% within Which is your profession	.0%	.0%	3.1%	.8%
	Strongly agree	Count	15	51	16	82
		% within HIV has been confirmed to be the cause of AIDS	18.3%	62.2%	19.5%	100.0%
		% within Which is your profession	65.2%	69.9%	50.0%	64.1%
	Agree	Count	7	16	14	37

	% within HIV has been confirmed to be the cause of AIDS	18.9%	43.2%	37.8%	100.0%
	% within Which is your profession	30.4%	21.9%	43.8%	28.9%
Total	Count	23	73	32	128
	% within HIV has been confirmed to be the cause of AIDS	18.0%	57.0%	25.0%	100.0%
	% within Which is your profession	100.0%	100.0%	100.0%	100.0%

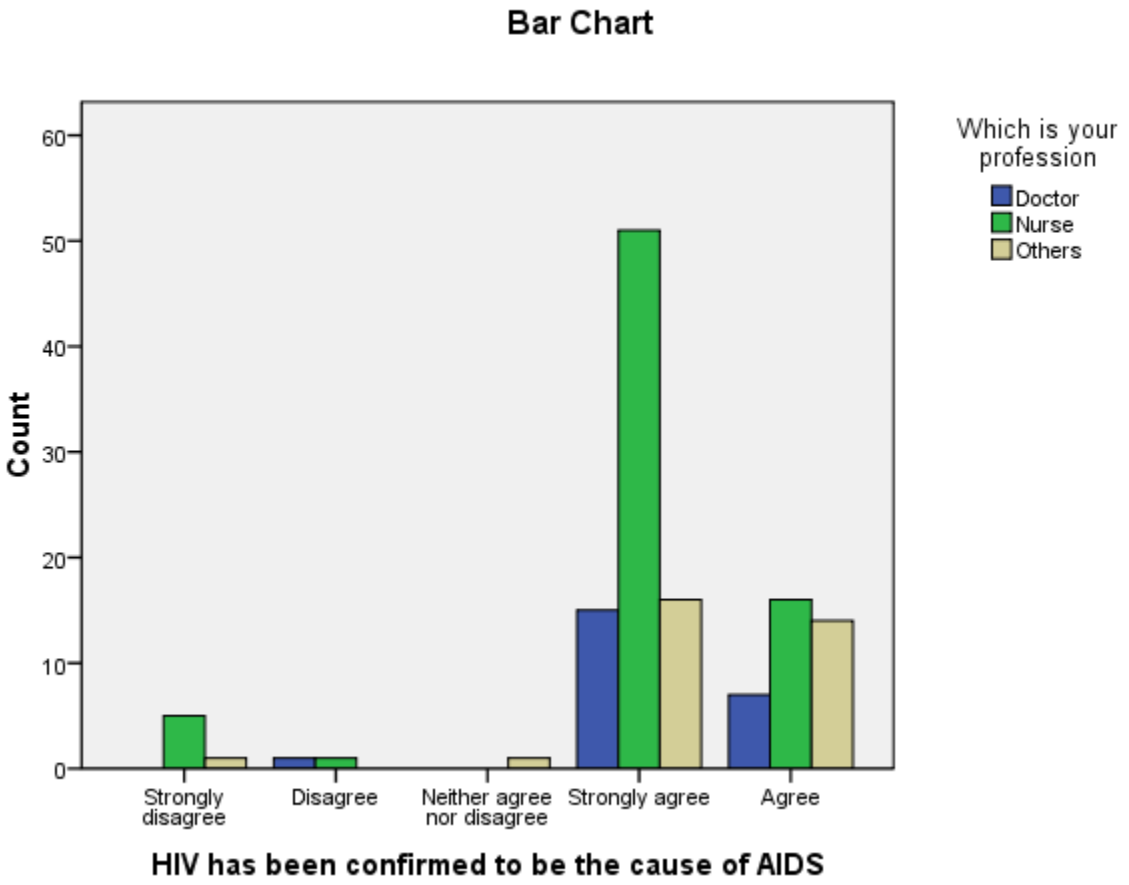

Figure 4.13 A cross tab of HIV is the cause of AIDS against different professional cadre distribution

Sexual behavior and risk-perception

The numbers of the respondents who disagree with the fact that correct use of condom can protect one from HIV infection consist mainly of nurses as shown in Figure 4.14. While it is noted that majority of the respondents cuts across all professional cadres agreed with that fact (96%); the few respondents that may not share that opinion need to be considered. While it can be deduced that majority of them has that knowledge about the role of condom in protection of HIV infection; how such knowledge is reflected with response to their attitude to risky sexual behavior leaves much to be desired as shown in Table 4.14 below.

Table 4.14 A cross tab of correct and consistent condom use and different professional cadre distribution

			Which is your profession			
			Doctor	Nurse	Others	Total
People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	Strongly disagree	Count	0	3	0	3
		% within People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	.0%	100.0%	.0%	100.0%
		% within Which is your profession	.0%	4.1%	.0%	2.4%
	Disagree	Count	0	1	0	1

		% within People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	.0%	100.0%	.0%	100.0%
		% within Which is your profession	.0%	1.4%	.0%	.8%
	Neither agree nor disagree	Count	0	1	0	1
		% within People can protect themselves from the AIDS virus by using a codom correctly everytime they have sex	.0%	100.0%	.0%	100.0%
		% within Which is your profession	.0%	1.4%	.0%	.8%
	Strongly agree	Count	3	21	12	36

		% within People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	8.3%	58.3%	33.3%	100.0%
		% within Which is your profession	13.6%	28.8%	38.7%	28.6%
	Agree	Count	19	47	19	85
		% within People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	22.4%	55.3%	22.4%	100.0%
		% within Which is your profession	86.4%	64.4%	61.3%	67.5%
Total		Count	22	73	31	126

	% within People can protect themselves from the AIDS virus by using a condom correctly every time they have sex	17.5%	57.9%	24.6%	100.0%
	% within Which is your profession	100.0%	100.0%	100.0%	100.0%

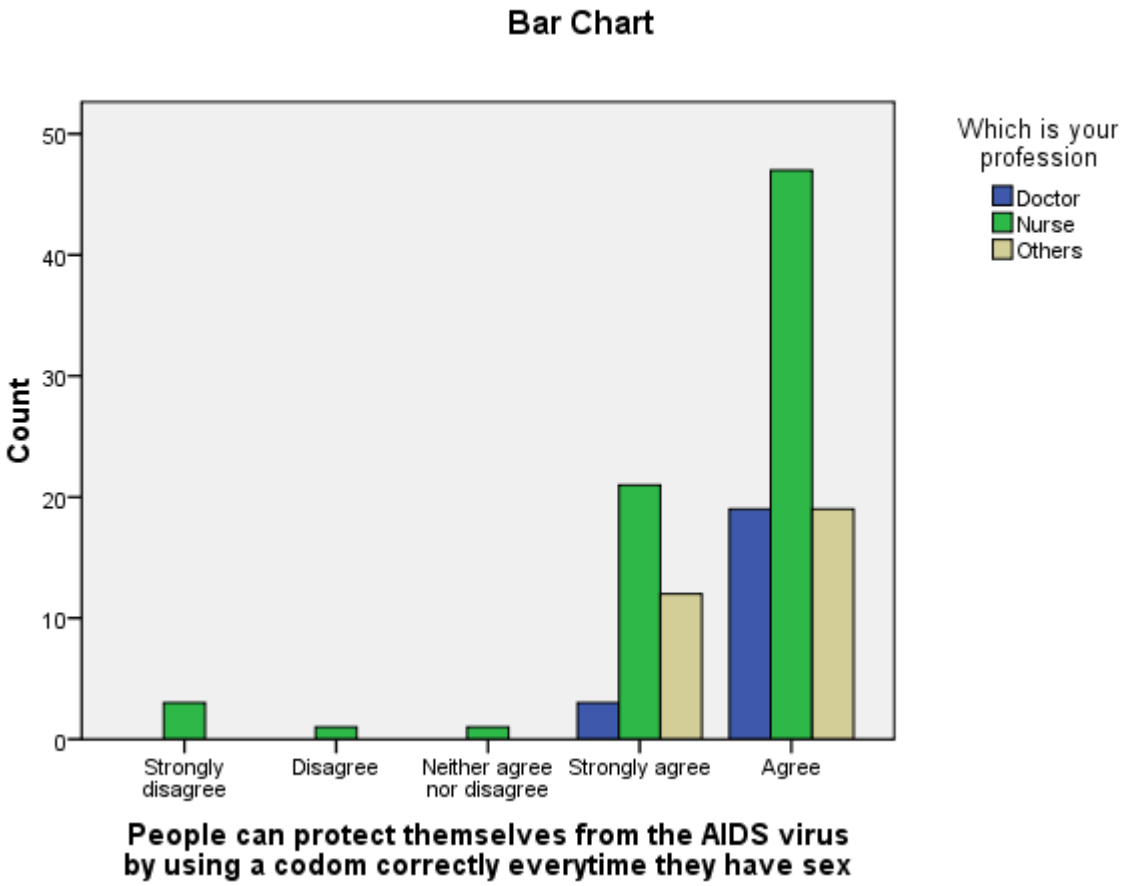

Figure 4.14 A cross tab of correct and consistent condom use and different professional cadre distribution

In Figure 4.15 of the 127 respondents to the question that having sexual relationship with a person of unknown HIV status is a risky behavior, 84 (66.1%) is in agreement while 43 (33.9%) of them disagreed. The 43 that disagreed cuts across all the professions with 26 of them nurses (60.5%), 12 (27.9%) consisting of other allied professionals while the 5(11.6%) Doctors constituted the remainder.

Table 4.16 A cross tab of having unprotected sexual relationship with partners of unknown HIV status against the different professional cadre distribution

			Which is your profession			
			Doctor	Nurse	Others	Total
Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	Strongly disagree	Count	0	11	3	14
		% within Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	.0%	78.6%	21.4%	100.0%
		% within Which is your profession	.0%	15.3%	9.4%	11.0%
	Disagree	Count	0	1	0	1
		% within Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	.0%	100.0%	.0%	100.0%
		% within Which is your profession	.0%	1.4%	.0%	.8%
	Strongly agree	Count	18	46	20	84

		% within Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	21.4%	54.8%	23.8%	100.0%
		% within Which is your profession	78.3%	63.9%	62.5%	66.1%
	Disagree	Count	5	14	9	28
		% within Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	17.9%	50.0%	32.1%	100.0%
		% within Which is your profession	21.7%	19.4%	28.1%	22.0%
Total		Count	23	72	32	127
		% within Do you think that having an unprotected sex occasionally with anyone of unknown HIV status is a risky sexual behaviour	18.1%	56.7%	25.2%	100.0%
		% within Which is your profession	100.0%	100.0%	100.0%	100.0%

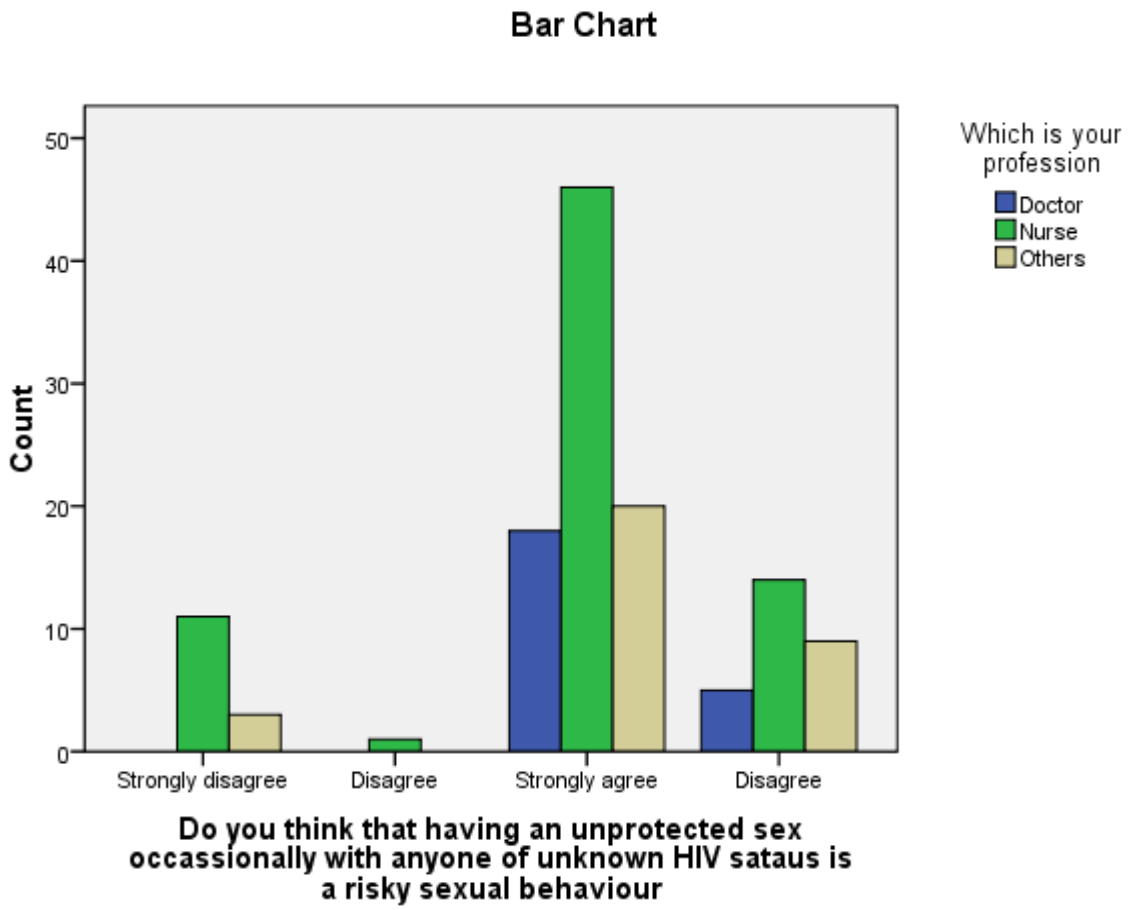

Figure 4.15 A cross tab of having unprotected sexual relationship with partners of unknown HIV status against the different professional cadre distribution

Condom use in stable relationship connotes different meanings to the respondents. Responses are shown in Figure 4.16. One hundred and nine (85.2%) of the 128 respondents agreed to the use of condom among couples when the status of one of their partner is unknown.The response to the question on whether the use of condom affect sexual relationship portrays an interesting finding. 71 (55.4%) of the total respondents disagreed with the fact that condom use affect sexual relationship while 42 (32.8%) respondents agreed. 15 (11.7%) of the respondents neither agreed nor disagreed; as shown in figure 19 below.. All the respondents cut across all the professions. It

may not be out of place to assume that a lot of HCWs may not be condomising effectively based on the impression that condom use during sex affect sexual relationship.

Of a total of 125 respondents to the question on the relevance of knowing their status and its effect on their sexual behavior, about 42 (33.6%) does not agree with that. A break down of this group of respondents reveal that it cuts across all the cadres of HCWs; with the nurses in the majority (54.8%) and closely followed by the doctors (33.3%) as shown in Figure 4.18.

Table 4.17 A cross tab of condom use in stable relationship against the different professional cadre distribution

			Which is your profession			
			Doctor	Nurse	Others	Total
Do you think that couples should use condom when they are not sure of their partner's HIV status	Strongly disagree	Count	0	0	2	2
		% within Do you think that couples should use condom when they are not sure of their partner's HIV status	.0%	.0%	100.0%	100.0%
		% within Which is your profession	.0%	.0%	6.2%	1.6%
	Disagree	Count	0	15	1	16
		% within Do you think that couples should use condom when they are not sure of their partner's HIV status	.0%	93.8%	6.2%	100.0%
		% within Which is your profession	.0%	20.5%	3.1%	12.5%
	Neither agree nor	Count	0	1	0	1

	disagree	% within Do you think that couples should use condom when they are not sure of their partner's HIV status	.0%	100.0%	.0%	100.0%
		% within Which is your profession	.0%	1.4%	.0%	.8%
	Strongly agree	Count	16	35	14	65
		% within Do you think that couples should use condom when they are not sure of their partner's HIV status	24.6%	53.8%	21.5%	100.0%
		% within Which is your profession	69.6%	47.9%	43.8%	50.8%
	Agree	Count	7	22	15	44
		% within Do you think that couples should use condom when they are not sure of their partner's HIV status	15.9%	50.0%	34.1%	100.0%
		% within Which is your profession	30.4%	30.1%	46.9%	34.4%
Total		Count	23	73	32	128

	% within Do you think that couples should use condom when they are not sure of their partner's HIV status	18.0%	57.0%	25.0%	100.0%
	% within Which is your profession	100.0%	100.0 %	100.0%	100.0%

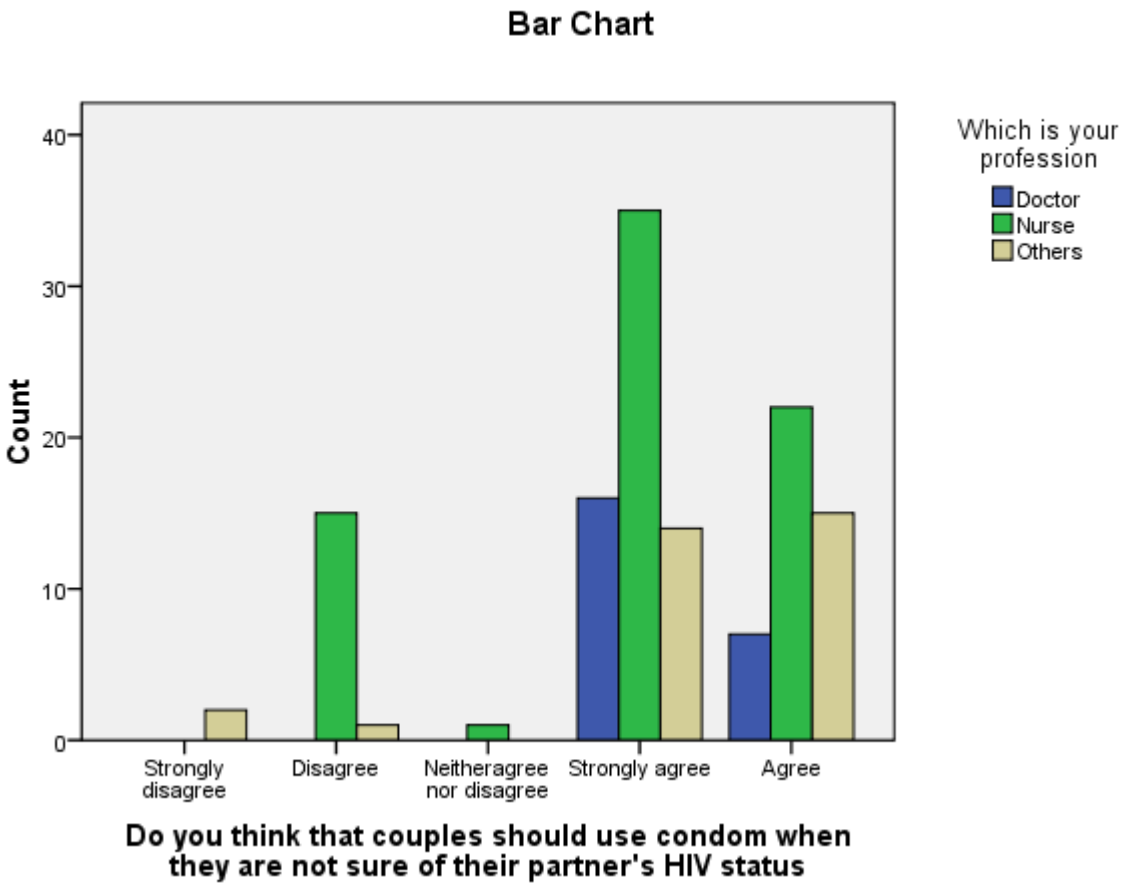

Figure 4.16 A cross tab of condom use in stable relationship against the different professional cadre distribution

			Which is your profession			
			Doctor	Nurse	Others	Total
Do you think that using condom during sex affect sexual relationship	Strongly disagree	Count	4	16	12	32
		% within Do you think that using condom during sex affect sexual relationship	12.5%	50.0%	37.5%	100.0%
		% within Which is your profession	17.4%	21.9%	37.5%	25.0%
	Disagree	Count	13	21	5	39
		% within Do you think that using condom during sex affect sexual relationship	33.3%	53.8%	12.8%	100.0%
		% within Which is your profession	56.5%	28.8%	15.6%	30.5%
	Neither agree nor disagree	Count	3	5	7	15
		% within Do you think that using condom during sex affect sexual relationship	20.0%	33.3%	46.7%	100.0%
		% within Which is your profession	13.0%	6.8%	21.9%	11.7%
	Strongly agree	Count	2	2	2	6

		% within Do you think that using condom during sex affect sexual relationship	33.3%	33.3%	33.3%	100.0%
		% within Which is your profession	8.7%	2.7%	6.2%	4.7%
	Agree	Count	1	29	6	36
		% within Do you think that using condom during sex affect sexual relationship	2.8%	80.6%	16.7%	100.0%
		% within Which is your profession	4.3%	39.7%	18.8%	28.1%
Total		Count	23	73	32	128
		% within Do you think that using condom during sex affect sexual relationship	18.0%	57.0%	25.0%	100.0%
		% within Which is your profession	100.0%	100.0%	100.0%	100.0%

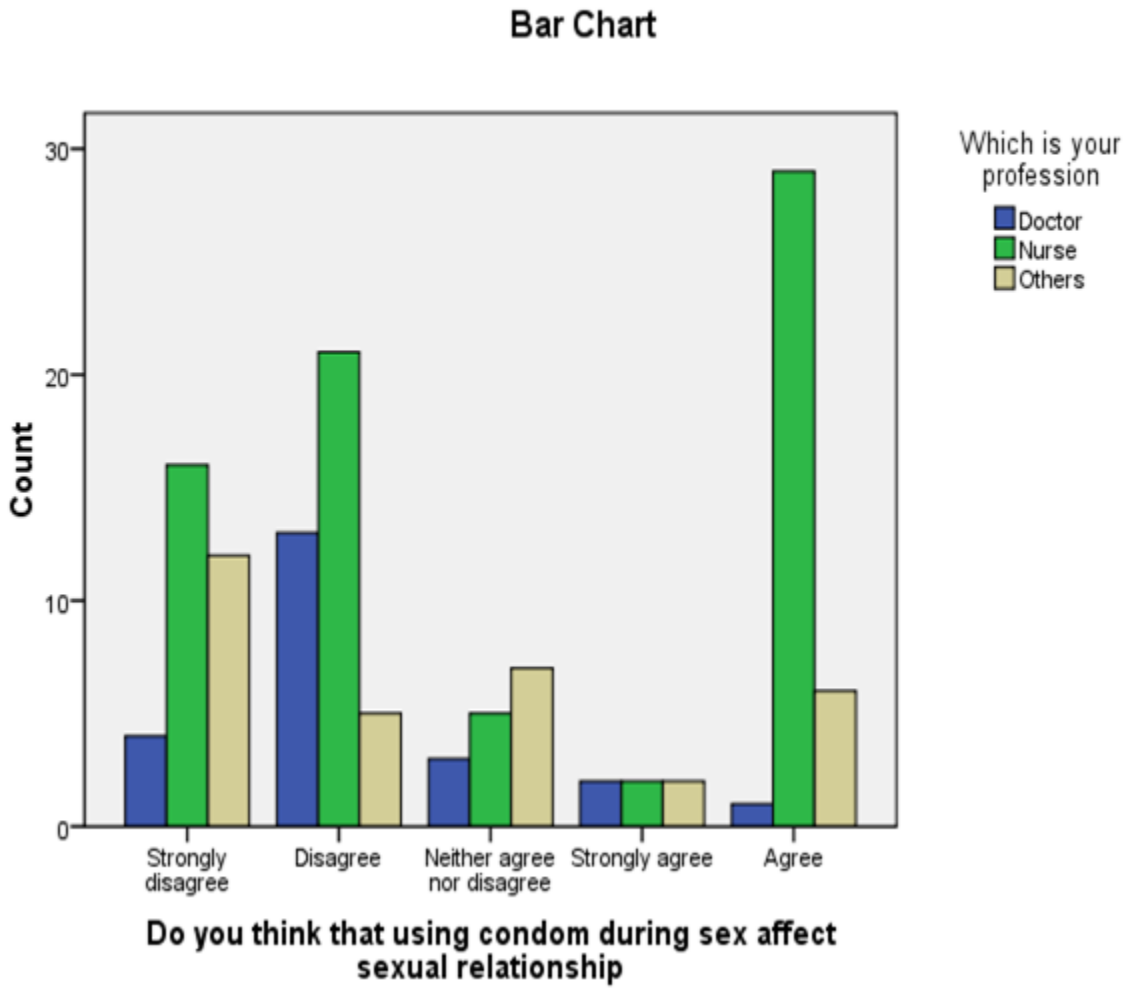

Figure 4.17 A cross tab of the use condom during sexual intercourse against the different professional cadre

Table 4.18 A cross tab of the use condom during sexual intercourse against the different professional cadre

			Which is your profession			
			Doctor	Nurses	Others	Total
Do you think that knowing your HIV status can affect your sexual behaviour	Strongly disagree	Count	11	18	4	33
		% within Do you think that knowing your HIV status can affect your sexual behaviour	33.3%	54.5%	12.1%	100.0%
		% within Which is your profession	47.8%	25.7%	12.5%	26.4%
	Disagree	Count	3	5	1	9
		% within Do you think that knowing your HIV status can affect your sexual behaviour	33.3%	55.6%	11.1%	100.0%
		% within Which is your profession	13.0%	7.1%	3.1%	7.2%
	Neither agree nor disagree	Count	1	0	4	5
		% within Do you think that knowing your HIV status can affect your sexual behaviour	20.0%	.0%	80.0%	100.0%
		% within Which is your profession	4.3%	.0%	12.5%	4.0%
	Strongly agree	Count	3	17	14	34

		% within Do you think that knowing your HIV status can affect your sexual behaviour	8.8%	50.0%	41.2%	100.0%
		% within Which is your profession	13.0%	24.3%	43.8%	27.2%
	Agree	Count	5	30	9	44
		% within Do you think that knowing your HIV status can affect your sexual behaviour	11.4%	68.2%	20.5%	100.0%
		% within Which is your profession	21.7%	42.9%	28.1%	35.2%
Total		Count	23	70	32	125
		% within Do you think that knowing your HIV status can affect your sexual behaviour	18.4%	56.0%	25.6%	100.0%
		% within Which is your profession	100.0%	100.0%	100.0%	100.0%

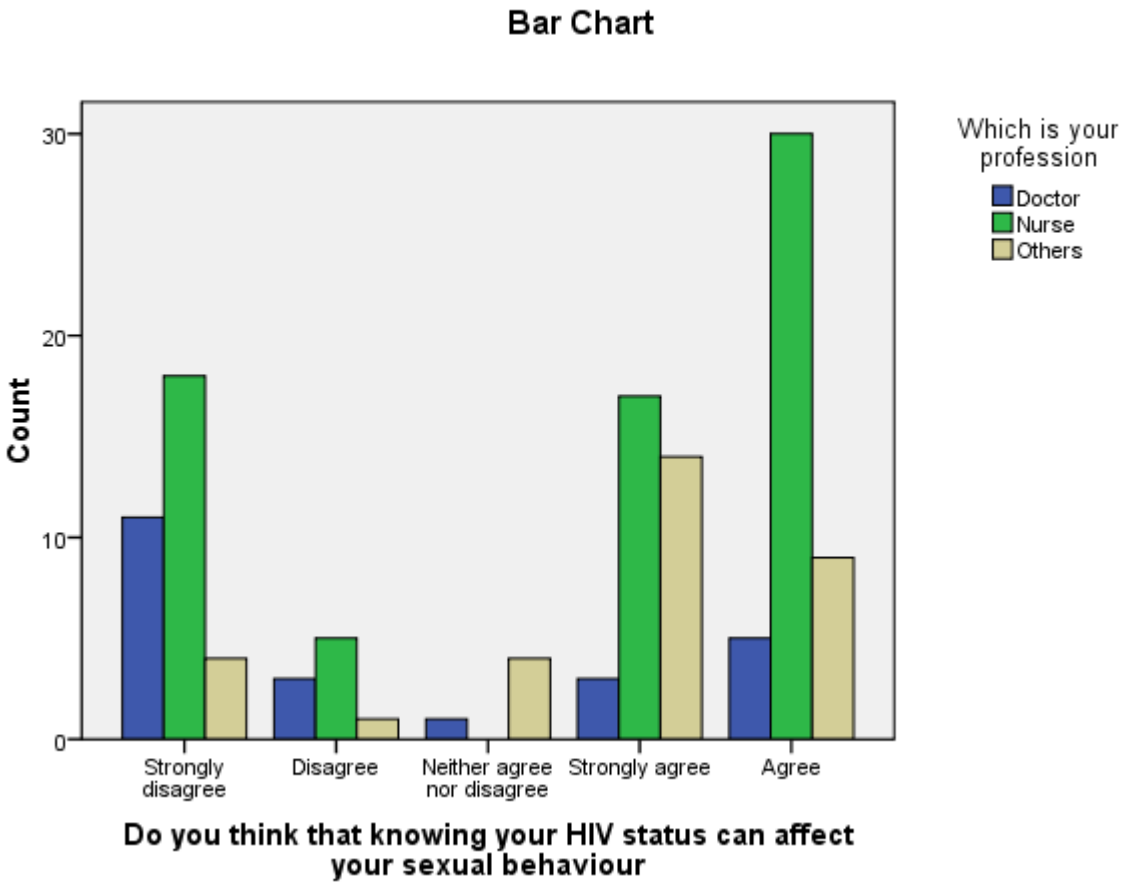

Figure 4.18 A cross tab of the effect of knowledge of HIV status on sexual relationship against the different professional cadre

Chapter 5. Summary and Conclusion

There is no doubt that HCWs in general Hospital Ogoja are quite knowledgeable with respect to information on HIV and AIDS. The findings from the study showed that greater that 90% of the respondents are quite knowledgeable with the cause of HIV, modes of transmission and prevention of HIV. This is in line with the general population which reflects a high level of knowledge and awareness based on the study by National Agency on the Control of AIDS (NACA) in Nigeria. While the knowledge may be high, there exist some gaps with respect to what type of knowledge they have and how it cuts across different cadres of HCWs. Disaggregation of the respondents with respect to their professions reveals that some level of knowledge gap still exist among health care workers and this cuts across all cadres. Although the findings tend to portray nurses as the worst culprit it may be necessary to conduct further studies to verify these findings.

Application of this knowledge with respect to their perception of risky sexual behavior is also a challenge. It is observed from the study that across all professional cadres' risky sexual behavior is still acceptable despite the perceived high knowledge of HIV infection. While a majority them aggrees on the critical role of condom in protection of HIV infection both in a stable and non stable relationship; quite a lot of them is still of the opinion that condom use affect their sexual relationship and that knowing the HIV status of their partner is not important in their relations ship. It will not out of place to suggest that this could really affect their use of condom and also the uptake of HCT among health care workers. This may not be surprising considering the fact there still exist incidence of new HIV infections and other STIs among the HCWs in GH Ogoja. The results of this study should be viewed with the knowledge that a number of assumptions were made with regard to the sexual risk profile of HCWs. Very few studies have been undertaken to understand the dynamics of the HIV epidemic and this group and none has been done in Nigeria so far. However a further a qualitative study with respect to focus group discussion to further analyze their sexual behavior will be a added advantage towards strengthen the recommendations. This is to further determine the biological and socio-cultural causes of unhealthy sexual behavior despite the available high knowledge of HIV/AIDS.

It is on the strength of the findings above that researcher will recommend or provide the following guidelines to HCWs when dealing with issues of knowledge of HIV/AIDS and sexual behavior:

- HCWs must know that high level of HIV infection occurs among partners in stable relationship and as such there is need for them to ensure that they and their partners know their HIV status
- That treatment is now a magic wand for prevention and that where one of the partner is infected should be encouraged to commence treatment immediately
- HCWs should know that they are not immune from the rest of the society with respect to HIV infection and must at all times ensure that the knowledge gained should be practicalized no matter the circumstances. Consistent and correct use of condom is the norm whenever they are engaged in risky sexual behavior
- HCWs should be in the vanguard of ensuring that functional PEP policy is implemented in their hospital and should serve as role model with respect to operationalizing the policy
- HCWs should know that for them to preserve the life of others in the context of HIV/AIDS they need to preserve their own life first by ensuring that the incidence of new infections among them is reduced to the barest minimum; if not totally eradicated. This they can start to do by supporting the current national campaign on know your status among all cadres of HCWs in GH Ogoja and to also ensure that their partners and relatives are brought up to speed in that regard.
- HCWs in GH Ogoja must ensure that issues of stigma among themselves and colleagues are not visible and should support their facility to put in place a functional work place policy that will guarantee the confidentiality of HIV test result, job security, employment and advancement in their career.

Conclusion

Health care workers live and interact freely with other members of the society and are potential bridging group for disseminating HIV into the larger population. Although knowledge of HIV among them is very high their full application of the knowledge with respect to sexual behavioural change needs to be revisited. It is obvious that they are affected by the socio-cultural factors in the wider society that really hampers their full application of the knowledge gained. A more qualitative study like focus group discussion will assist in unraveling this observation. While not much studies has been done in this regard in Nigeria. It will be helpful to unravel this

dynamics. The management of GH Ogoja could play a critical role in this respect by supporting the HCWs with functional work place policy to help reduce the incidences of HIV infection and other STIs among their staff and in turn contribute to the overall reduction of this epidemic across the country.

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