THE IMPACT OF HIV/AIDS AWARENESS CAMPAIGNS ON STUDENTS WHO ENROLLED FROM 2009-2011 AT CENTRAL UNIVERSITY OF TECHNOLOGY, FREE STATE

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ABSTRACT

Central University of Technology (CUT) holds awareness campaigns on yearly basis to educate and test students on health realted issues. Basic knowledge about the spread of HIV and safe sexual practices has a critical impact on prevention of the acquired immunodeficiency syndrome (AIDS) and other associated diseases such as TB. The problem among students at higher education institutions (HEIs) is that they are a high risk group of contracting HIV infection due to uninformed decisions that they endup making. This study aimed to assess the knowledge and attitudes of CUT studens towards HIV, sexual transmitted infections (STIs) and sexuality. A cross sectional survey of 120 randomly selected undergraduate students (73 females, 47 males, aged 18-25 years) was performed. Questionnaires were used to assess the knowledge and attitude of the students towards HIV and AIDS. Generated knowledge and attitude scores from the student responses and gender variable were used to study their association. Students had heard about HIV, and 93% understood that HIV is not curable. Ninety percent of the students were aware of the symptoms of STIs, and some didn't know that STIs are associated with an increased chances of having HIV. Participants were well informed about selected aspects of HIV. A high number of participants were conversant with the modes of spread of HIV and the use of condoms in preventing STIs and HIV infection. The gap of knowledge between males and females, and the way they attend to the testing facility suggests the need for targeting males in the national awareness campaigns. The Medical Center should continue to host and fund health awareness campaings because they play a major role as source of information.

Keywords: Sexual practice, Condom

1. INTRODUCTION

Knowledge about the spread of HIV and safe sexual practices have a critical impact on the prevention of HIV/AIDS globally. HIV/AIDS is a major public health problem globally and in South Africa. According to estimates made by the Department of Health (South Africa) 5.2 million adults and children were living with HIV in 2008 representing 10.6% of the population (South African Department of Health, 2010; HEAIDS, 2010).

In the context of overall prevalence of HIV in all institutions, workplaces, and communities in South Africa, Higher Education Institutions (HEIs) are affected and impacted upon by HIV and AIDS the most.

At HEIs, responses in the form of policies and programmes have been implemented over the past two decades, to various extents at different institutions the prevalence of HIV within institutions has not been known and this has constrained planning process (HEAIDS, 2010).

In November 2007 a national survey was commissioned by HESA (Higher Education in South Africa) to establish the knowledge, attitudes, behaviour and practices (KABP) related to HIV/AIDS and to measure the prevalence among staff and students at higher institutions (HEAIDS, 2010). A study from the late 1990s at the University of Durban-Westville using clinic data reported an HIV prevalence of 26% for female students and 12% for male students between the age of 20-24 (HEAIDS, 2010). In another study done at the University of Kwazulu-Natal Durban campus, it was reported that in 240 people who tested for HIV, there was a prevalence of 13.4% in males and 16.3% in females (HEAIDS, 2010). At the University of Western Cape in the year 2000, data was analyzed for students seeking voluntary counselling and testing at the campus health clinic and a 10% HIV prevalence among students was reported (HEAIDS, 2010). This study had no disaggregation by sex, age and race but the reported 10% among students, these results were similar to the survey conducted by the HSRC (Human Science Research Council) on HIV prevalence among 15-24 years old students and to survey by the RHRU (Reproductive Health Research Unit) which was 10.2% (Rehle et al., 2007; South African Health Review 2008; UNAIDS, 2010).

The University of Johannesburg in 2000 completed a large scale study of HIV prevalence and reported HIV prevalence of 1.1% (HEAIDS, 2010). In the study done at University of Johanneburg, both male and female students reported that they initially tended not to adequately manage the risks associated with their new found freedom (HEAIDS, 2010). The most notable risk during this period was casual sexual intercourse without using protection in the context of alcohol (HEAIDS, 2010). Heterosexual intercourse was identified as the principal mode of transmission of HIV infection accounting to 75 % of all HIV infections (Vasan et al., 2000). Sexually active youth have been identified as a group at high risk of HIV infection (HEAIDS, 2010). There is substantial evidence that STIs enhance the transmission and acquisition of HIV infection and that control of STIs is helpful in prevention of HIV/AIDS (Vasan et al., 2000).

The spread of HIV in any community is determined by the knowledge and attitudes towards sexuality of its members, and by the sexual practices (Kirby et al., 2006). Gaps in knowledge include misconceptions about the distinction between HIV and AIDS, the influence of STIs, perinatal transmission, and incorrect modes of transmission. With difficulties in discovering effective and affordable HIV vaccines, avoidance of infection, through appropriate modifications in sexual behaviour and prompt diagnosis and treatment of other sexual transmitted infections, remains the most viable health seeking strategy for individuals in sub-Saharan Africa.

For those involved in public health two question are currently central with regard to the likelihood of behaviour change. Firstly, is the behaviour change taking place and what kinds of changes are occuring? Secondly, who is changing behaviour and who is not and what are the motivations and obstacles in each case such as, the demographic, socio-ecomomic and psychological determinants of behaviour change and how might these be influenced via intervention programmes (Gregson et al., 1998)?

Prevalence, knowlegde of and attitude towards HIV among students, behavioural changes and practice in the tertiary education sector are components that researchers must critically continue to study to better understand the most efficient methods for carrying out health awaraness campaigns (HEAIDS, 2010; Kirby et al., 2006; Noar et al., 2009, Department of Science and Technology, 2009). Globally, HEIs have recently been commissioning HIV prevalence, even though there is no indication of when the same surveys will be repeated (Vasan et al., 2000; HEAIDS, 2010). Studies have shown that students tend to be more delighted by being away from home for the first time and find difficulty in making sound decisions. This can be contributed to lack of experience to make good, less risk decisions, especially regarding sexual issues and the use of alcohol (Sallah et al.,1999; HEAIDS, 2010). Studies have indicated that there is an improve and measurable impact during awareness campaigns and without campaigns, conditions worsened (Noar et al., 2009)

In a study done by Vasan and colleagues (2000) the following was observed among students sampled: that most had heard about HIV and AIDS (acquired immune dificiency syndrome), 45% knew that AIDS is not curable at present, 34% were aware of the symptoms of STI's (sexually transmitted infections), and 47% said that STIs are associated with increased risk of HIV/AIDS (Vasan et al., 2000). In multivariable analyses, male students (0.001%), and urban residents (0.006%) demostrated a higher knowlegde of AIDS and STIs (Lal et al., 2000). Students from urban areas (0.014%) and those practising the christian religion (0.042%) were aware of favourable positive attitudes towards AIDS (Snedor et al., 1992).

Amongst the 83 studies done in Scotts Valley, California on sex and HIV education programs, mostly focusing on the following aspects; the impact on sexual behaviours of young people throughout the world; the impact of curriculum based sex and HIV education programs on sexual behaviour and mediating factors among youth under 25 years the following conclusions were made; two thirds (66.7%) had a significant positive impact on one or more of these sexual behaviours or outcomes, while 7% had a negative impact on one or more of these behaviours or outcomes (Kirby, 2007). Some of the campaigns have made a positive impact such as United State, Becoming a Responsible Teen increased abstinence, reduced the number of sexual partners, increased condom use, and reduced unprotected sex. This study yielded a 33% positive impact on two or more behaviours or outcomes (Noar et al., 2009).

In Tanzania, the MEMA kwa Vijana intervention reduced both the number of sexual partners among males and increased condom use among males and females (Noar et al., 2009). The outcomes of these studies are particularly noteworthy, because they all employed experimental designs and measured the impact on behaviour for at least one year (Kirby, 2007; Noar et al., 2009). The positive effects of some curriculum based programs lasted only a few months, the effects for other programs lasted for years (Kirby, 2007).

The problem among students at HEIs is that they are a group at high risk of contracting HIV/AIDS infection. Being away from home could change their behaviour or social life. This high risk behaviour among the youth and the societal lack of communication about sexual matters is likely to be conducive to the spread of HIV infection. Even though the CUT (Central University of Technology) have two weeks of health awareness campaigns yearly, do they have impact on students behaviour with regard to HIV, HIV testing and making informed decisions? The main objective of the study was to assess the impact of health awareness campaigns with the main focus on the levels of knowlegde, attitudes, behavioural and sexual practices amongst students aged 18-25 students in CUT, Free State over 3 years.

2. METHODOLOGY

2.1 Study design

This study was a descriptive cross sectional study.

2.2 Ethical consideration

The research proposal was submitted with permission from the Dean of the Faculty of Health and Environmental Sciences and approved by the ethical committee of the University of Free State, referenced Etovs number 67/2011. The aim and objectives of the study; were explained to consenting participants taking care to emphasize that it was a knowledge assessment survey and was not intended as an evaluation of individuals routine health. The students were instructed not to write their names or identify themselves in any way on the questionnaire but only use the first three digits of their student number (e.g 209 for 2009 enrollment).

2.3 Study population

The study population was the Central University of Technology students who enrolled from 2009-2011, aged between 18-25 years. A total of 120, (73 females and 47 males) participated, 40 from each faculty namely, the Faculty of Engineering, Information and Computer Sciences, Faculty of Health and Environmental Sciences and the Faculty of Management, Tourism and Hospitality.

2.4 Inclusion- and Exclusion Criteria

The inclusion criterion was that participants can be of any cultural background. The students were randomly selected from the faculties. The age group of randomly selected students ranging between 18 to 25 years. Their first enrollment must have been between 2009 to 2011. Those who registered before 2009 and 26 years or older were excluded from the study, because from the age of 26 most people are at HEIs on part time basis, or if they are full time it is ussually not the first time they are at a university.

2.5 Materials and Method

The materials for the study was a printed questionnaire containing the different sections for manual capturing of the data. Questionnaire pamphlets were distributed and completed by voluntary CUT students participants.
The questionnaire was divided into the following sub-sections:

(1) Sources of information, (2) knowledge about HIV transmission and protective measures, (3) responses of students attitudes towards HIV and gender equity, (4) communication behaviour and sexuality (5) students sexual behaviour and practices, (6) students perceptions about CUT leadership towards HIV/AIDS campaigns, (7) Students HIV testing behaviour.

3. RESULTS AND DISCUSSION

Students were allowed to choose more that one option as a source of information. Television was found to be the top source where students get information about HIV/AIDS, followed by awareness campaigns and magazines. The lectures and parents formed part of the sources where few students get information with 8% and 10%, respectively. While on gender base males listened to radio than acquring information from awareness campaigns (Table1). This collaborated well with the report about lack of communication between students and parents especially with health related issues (HEAIDS, 2010).

As shown on Table 2, all students (100%) were aware that the toilets and (86%) mosquito's do not transmit HIV, while (75%) breastfeeding and (66%) unprotected sex do transmit the virus. Most students (83%) were also aware of the protection provided by condoms even against sexually transmitted infections (90%). Ninty-three percent were also aware that the HIV is not curable and all agree that ARV (anti-retroviral) treatment helps. One should also be concerned about other students who tend to answer the mode of transmission such as sex (1%), breastfeeding (25%) and even unprotected sex (34%) incorrectly. Students are representatives of the different places that they are from and can spread wrong information to their families and communities.

As shown on Table 3, it can be concluded that stigmatising attitudes to people living with HIV was found to be very low, with around 12% believing that people living with HIV are paying the price of living immoral life. More males (32%) than females (7%) believed that women are more responsible than men for prostitution. However, there were lower levels of agreement among students with the statement that a man can have premarital sex, but a woman should not; which was 13% and 3% for males and females, respectively.

Table 1: Sources of information

Sources of Information	Male	Female	Total	%(Male & Female)	% Male	% Females
News paper	29	39	68	12%	13%	11%
Television	43	61	104	18%	20%	17%
Magazine	24	43	67	12%	11%	12%
Radio	35	46	81	14%	16%	13%
Friends	22	40	62	11%	10%	11%
A campaigns	29	59	88	15%	13%	16%
Lectures	17	32	49	8%	8%	9%
Parents	18	41	59	10%	8%	11%
Total	217	361	578			

Table 2: Knowledge about HIV transmission and protective measures

Source of infection	Male	Female	Total	Choice	% (Male & Female)	% Male	%Female
Toilet	47	73	120	Yes	100%	100%	100%
	0	0	0	No	0%	0%	0%
Sex	46	73	119	Yes	99%	98%	100%
	1	0	1	No	1%	2%	0%
Breast Feeding	29	61	90	Yes	75%	62%	84%
	18	12	30	No	25%	38%	16%
Mosquitoes	43	63	106	Yes	88%	91%	86%
	4	10	14	No	12%	9%	14%
Unprotected Sex	28	51	79	Yes	66%	60%	70%
	19	22	41	No	34%	40%	30%
HIV-Curable	5	4	9	Yes	8%	11%	5%
	42	69	111	No	93%	89%	95%
Condoms protect	36	64	100	Yes	83%	77%	88%
	11	9	20	No	17%	23%	12%
Condoms protect (STI)	42	66	108	Yes	90%	89%	90%
	5	7	12	No	10%	11%	10%
STI causes HIV	35	65	100	Yes	83%	74%	89%
	12	8	20	No	17%	26%	11%
ARV treatment helps	47	73	120	Yes	100%	100%	100%
	0	0	0	No	0%	0%	0%

Table 3: Responses of students attitudes towards HIV and gender equity

Perspectives	Male	Female	Choices	Total	%(Males & Females	% Males	%Females
people who lead immoral live will get HIV	8	5	Agree	13	11%	17%	7%
	39	68	Disagree	107	89%	83%	93%
HIV patients pay the price	7	7	Agree	14	12%	15%	10%
	40	66	Disagree	106	88%	85%	90%
Women are responsible than men for prostitution	15	5	Agree	20	17%	32%	7%
	32	68	Disagree	100	83%	68%	93%
Men can have premarital sex but not women	6	2	Agree	8	7%	13%	3%
	41	71	Disagree	112	93%	87%	97%

The majority of participating students (88%) indicated that they communicate with friends followed by brothers/sisters (66%) about sexual matters, rather than with the parents (47%) (Table 4). This have also been shown in HEAIDS report where comumunication with parents ranked low compared to with friends (HEAIDS, 2010). The results indicate that stigma is attached to the word sex, or is not part of certain cultures to discuss sexual issues with parents (but this will need to be proven in future studies). Lack of communication about sexual matters and the combination of high risk behaviour among our youth is likely to be conducive to the spread of HIV infection.

Table 5 shows that students agreed on being involved in premarital sex (73%), most indicated having used condoms before (64%). There is also a contradiction, because the total of those who used and don't use condoms are more than those who indicated having premarital sex. It indicates that students knew about prevention measures of infections and pregnancy. It is encouraging to note that 27% in this study reported never having sexual relations. It was found in this study that 25% have more than one sex partner with majority being males (20/29). Having sexual relationship with different partners is associated with the high risk of HIV infection. HIV is spread more rapidly in the population in which the partnerships were concurrent. Numerous studies showed that the rate of change of sexual partners especially, concurrent partners is a crucial determinant in the spread of STIs, including HIV (HEAIDS, 2010, Vasan et al., 2000).

Table 4: Communication behaviour about sexuality

Communicate with	Male	Female	Choices	Total	%(Males & Females)	% Males	%Females
Friends	42	64	Yes	106	88%	89%	88%
	5	9	No	14	12%	11%	12%
Parents	19	37	Yes	56	47%	40%	51%
	28	36	No	64	53%	60%	49%
Sisters/Brothers	30	49	Yes	79	66%	64%	67%
	17	24	No	41	34%	36%	33%

Table 5: Students sexual behaviour and practices

Sexual behavior and practice	Male	Female	Choices	Total	%(Males & Females)	% Males	%Females
Ever had sex	35	50	Yes	85	73%	80%	68%
	9	23	No	32	27%	20%	32%
Used condom during the last sex ual encounter	27	42	Yes	69	64%	61%	66%
	17	22	No	39	36%	39%	34%
Sex with more than 1 partner in the past 12 months	20	9	Yes	29	25%	45%	13%
	24	62	No	86	75%	55%	87%

Seventy-two percent knew the place in the institution where they can go for help and support if they are diagnosed HIV positive (Table 6). Most (64%) students believed that management at this institution takes HIV and related issues seriously, while around 36% were of the opinion that the campus management are not doing much. Fifty-eight percent of students reported that the Student Representative Council (SRC) in the institution is not taking HIV issues seriously. This number is concerning, since the SRC as student movement should play a critical role in guiding and supporting students, especially first years, over the first few months with health related issues. Eighty-five percent of students have a strong believe that sex education should be part of the curriculum. The results confirmed what was published by Vasan et al. (2000) emphasizing the need to improve the role of lecturers in HIV/AIDS awareness campaigns.

Table 6: Students perceptions towards CUT leadership

Perceptions about management	Male	Female	Choices	Total	%(Males & Females)	% Males	%Females
Place of help at CUT (HIV +)	33	53	Yes	86	72%	70%	73%
	14	20	No	34	28%	30%	27%
CUT management takes HIV/AIDS seriously	25	52	Yes	77	64%	53%	71%
	22	21	No	43	36%	47%	29%
CUT SRC takes HIV/AIDS seriously	17	34	Yes	51	43%	36%	47%
	30	39	No	69	58%	64%	53%
Part of the curriculum	42	60	Yes	102	85%	89%	82%
	5	13	No	18	15%	11%	18%

The majority of students (81%) have tested for HIV before. A significant number (49/110) have not, while most females (60%) have tested at the university (Table 7). This collaborated well with statistics of July 2010 awareness campaign at CUT clinic, where it was noted 48 females and 28 males tested for HIV. The data of daily routine testing at CUT clinic show that 170 females and 159 males tested for the first eight months of 2011. The awareness campaigns that was done during end of August 2011 yielded better results in total 726 students tested for HIV (410 females, 316 males).

Table 7: Student HIV testing behaviour

HIV Testing behavior	Male	Female	Choices	Total	%(Males & Females)	% Males	%Females
Tested HIV before	34	63	Yes	97	81%	72%	86%
	13	10	No	23	19%	28%	14%
Tested HIV in the past 12 months	24	41	Yes	65	54%	51%	56%
	23	32	No	55	46%	49%	44%
Tested HIV at CUT	23	38	Yes	61	55%	49%	60%
	24	25	No	49	45%	51%	40%

4. CONCLUSIONS

The study sample represented population age of between 18-25 years, which included CUT students who participated voluntarily. The questionnaires were not distributed equally as there is more females than males in CUT.

Students were of the opinion that television, awareness campaigns and magazines played a major role as a distributing source of information. Most students were well informed about selected aspects of HIV/AIDS.

Many of students have substantial knowledge about and positive attitudes towards the use of condoms in preventing STIs, HIV infection and even pregnancy. There is however a noticiable gap of basic knowledge about diffent aspect of HIV/AIDS between males and females students, in all probability attributed to diferences in cultural background. It was also noted that parents and lectures are not playing a noticiable role in dissiminating information about HIV/AIDS to students, as would expected as they are the original source of informatiion in most cases. The source of information between students, friends and brothers/sisters were not investigated, and we are living in times were social networking is taking over. Facebook, twitter, Mixit, WhatsApp, to mention but a few, could be the leading modes of communication between the students. Because most parents are baby boom generation, the current Y Generation prefer comunication via social network sources, rather than face to face. This calls for the CUT Medical center and partners to start using social network to inform students about the different awareness events on campus. The results of the study encourage the Medical Center and partners to start sending statistical reports to students so as to encourage participation, especially of the male students.

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