



Research Article

---

# Exploration of HIV/AIDS Related Knowledge, Attitude and Practice of University Community: The Case of Ethiopian Civil Service College

**Philipos P Gile**

Institute of Public Management and Development Studies , and Head of HIV/AIDS Management Unit CMC Road,P.O.BOX 5648(Office) and 14051(Pvt), Yeka sub-city, Addis Ababa, Ethiopia

Email: [pg\\_philipos@yahoo.com](mailto:pg_philipos@yahoo.com)

Accepted 18 July 2013

---

## Abstract

Even though HIV/AIDS is the worst health crisis in recorded history in the world, it has clearly moved beyond being primarily a health issue, to developmental crisis. More than 83% of all new infections in many African countries are among young and productive people in which females are outnumbering males. Higher learning institutions such as the Ethiopian Civil Service College (ECSC), as knowledge generation sources, and with perceived skills contributing to the generation of business leaders, need to seriously address HIV/AIDS as a cross-cutting issue in their mandate. There is lack of adequate documentation on HIV/AIDS related knowledge and behaviors among the university community. The study sought to assess HIV/AIDS related knowledge, attitude and behaviors of ECSC community, and contribute to the literature in the field. A cross-sectional survey was conducted between January-June 2011 by using mixed methods where structured questionnaire was administered for 250 systematically selected respondents while purposively selected key informants were interviewed. Out of 250 respondents, 238 (with 95% response rate) returned the questionnaire. Eight key informants and observations were used for triangulating data. The study found that the majority of (students and staff) respondents know about HIV&AIDS. The study found no correlation between being postgraduate and undergraduate student; being married or no. It was found that all respondents (married or unmarried, those who use or not use condoms) never perceive they are at risk for HIV. Unsafe sex, multiple concurrent sexual partnerships were found among all religious groups, married staff and students. However, compared to female respondents, males were found more exposed to unsafe sex. Qualitative data supports this finding. Significant number of respondents was willing to take and few actually took HIV counseling and testing to know their status. There were positive changes on awareness and attitudes towards HIV/AIDS, yet comprehensive knowledge is lacking, even those who have knowledge did not practically apply it in using HIV prevention services like consistent condom use. There is a need for improved strategies of promoting comprehensive knowledge and behavioral change interventions of the college, which could also be scaled up to other institutions.

**Key words:** HIV/AIDS, Knowledge, Attitude, Practice, University Community, Ethiopia

## BACKGROUND

Scientists on the field of HIV/AIDS research failed to get the exact time and place, when and where HIV/AIDS originated in the globe. Nevertheless, in 1981 the first case of AIDS epidemic was reported in United States of America. After a

Number of gay men had developed a rare lung infection called “Pneumocystis Carini”. However, there common understanding that the AIDS epidemic began spreading in 1980 in North America, and has quickly reached all corners of the globe (UNAIDS, 2000).Two years later, scientist confirmed that HIV is the cause for AIDS. But, based on the increment of the prevalence of HIV/AIDS within short periods of the time thought the world, it might have existed before the started period of the time.

As one of the development crises, the HIV/AIDS epidemic is still spreading all over the world, we are actually observing and hearing still new infections, still deaths and expanding its spatial coverage even to the very remote areas. It is a disease which affects all sectors, settings and sections of society. The pandemic is “unique in its devastating impact on the social, economic and demographic foundations of development”, thus has negative effects on development hence impacts the public sector capacity to deliver. Over 65 million people have been infected with HIV to date and AIDS has killed more than 25 million people since it was first recognized in 1981. More than 83% of all new infections in many African countries are among young and productive people in which females are outnumbering males (ILO, 2004; Lawrence et al., 1997; Philipos, 2010 and UNAIDS, 2010).

There are arguments and counter arguments about HIV/AIDS; some say it first appeared in the United States in the early 1980s, the disease has been around for much longer. When scientist retested some stored blood samples collected decades earlier, they found that an HIV infection in some blood collected in Africa during the 1950s. The other question, which is not yet addressed, is how HIV/AIDS originated. Since its identification till the present time, scientists have been continuing their research to discover the sources of this deadly infection. There is also a widely propagated theory claimed by religions people who have been arguing that the disease is a plague ordered by God against human being who do not observe his commandments([www.unaids.org](http://www.unaids.org) accessed March 2010).

Over three decades after HIV/AIDS was first reported by the Communicable Diseases Control (CDC) in 1981, more than 33 million people world are estimated to be infected with HIV/AIDS. Sub-Saharan Africa, the global epicenter of the AIDS pandemic, still is home to over two-thirds of HIV infected people, with prevalence among adult ages 15-49(this is recognized as the age bracket of productive labor force and public service gate keepers) estimated to be 5.0 percent AIDS killed million Africans and has reduced life expectancies in the most affected countries to their pre-1970 levels (UNAIDS,2010).

As can be seen from the following data(Figure 1-3) sub-Saharan Africa, with about 22.5 million people living with HIV/AIDS and 1.3 million new infections, is the most affected region in the world(UNAIDS, 2010). More than 83% of all new infections in many African countries are among young and productive people in which females are outnumbering males. And people and institutions of public service sector including higher learning institutions are not immune from HIV/AIDS induced problems (Akukwe, Chinua, 2005; ADF, 2000; ILO,2004 and 2005;Botchwey, 2000).

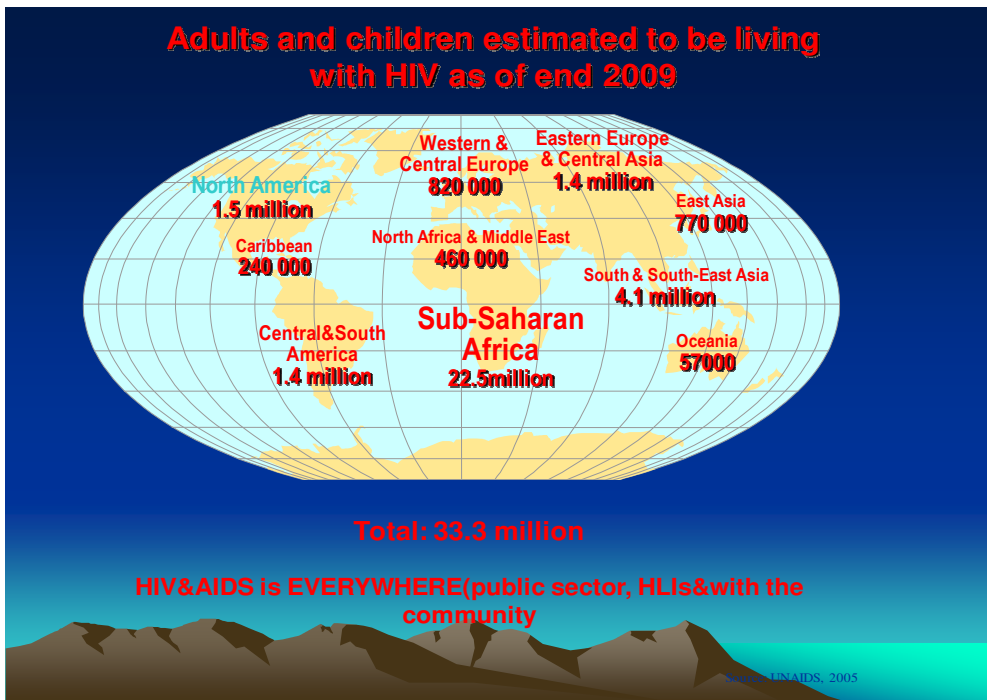


Figure 1. Total Number of PLWHA(Source: UNAIDS, 2010)

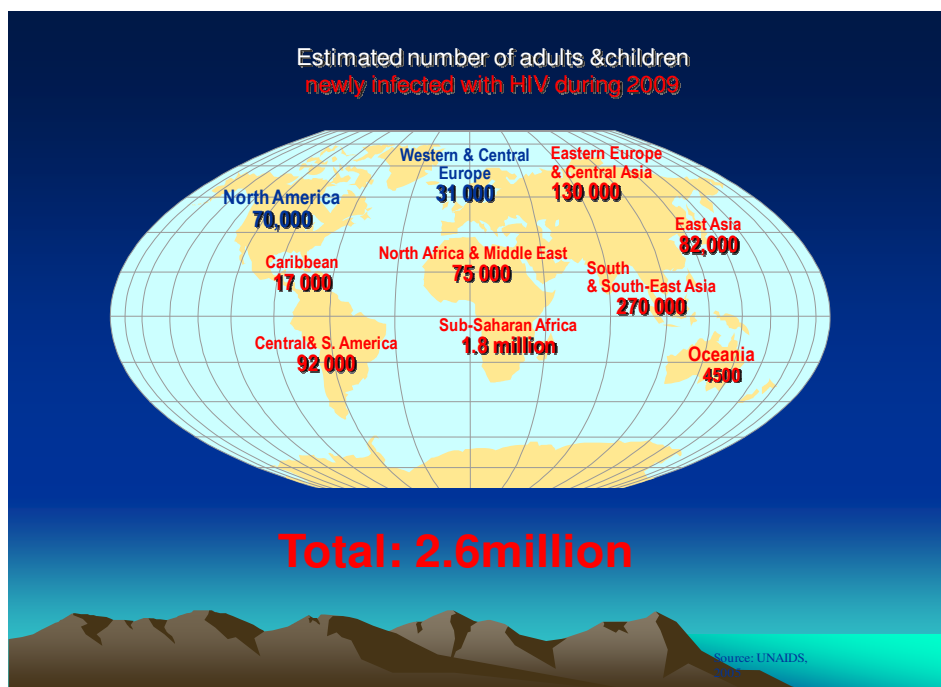


Figure 2. Total Number of New HIV infections (Source: UNAIDS, 2010)

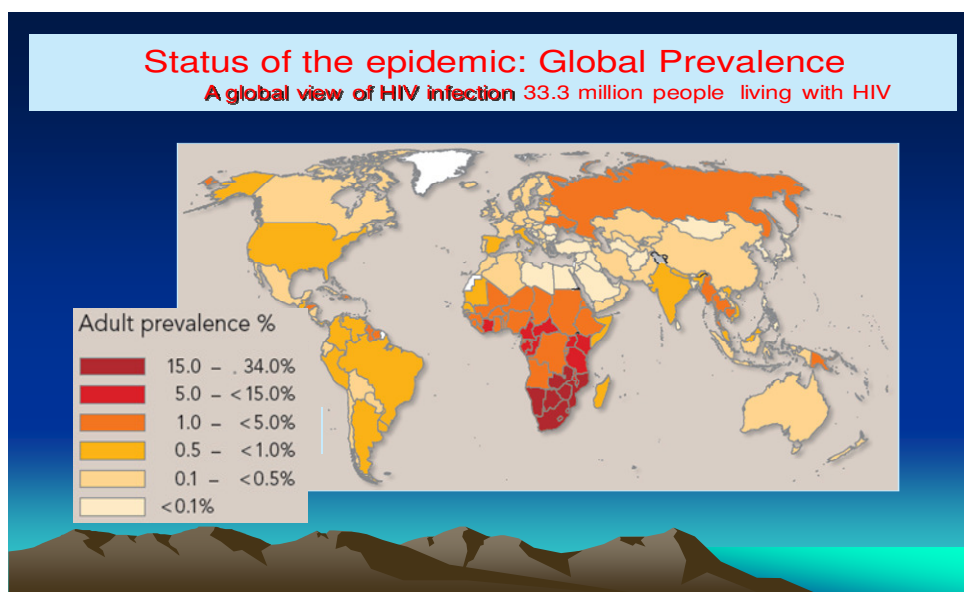


Figure 3. Status of the Epidemic showing a global view of prevalence of HIV infection (Source: UNAIDS 2010 Report on Global AIDS Epidemic)

With regard to knowledge, attitudes and behaviors concerning HIV/AIDS infection and services, many studies (Rikka and Osmo, 1999; Bimbola and Florence, 2008; Lawrence et al., 1997; Xiaoming et al., 2004) depicted that favorable and encouraging knowledge and attitude changes towards HIV/AIDS, its transmission, prevention mechanisms and good perceptions towards caring for people infected or affected by the HIV virus and effects of AIDS. However, as the studies reported, despite their good knowledge about HIV, educational and marital status, most respondents who were sexually active and were engaged in high risk sex including casual sex, multiple concurrent sexual intercourse as well as sex in exchange for money, or favor. Whilst, significant number of respondents has misconception about HIV and AIDS, transmission and protection means hence many young adults, women and people from public service were not adequately looking for prevention care and treatment services. This clearly shows how the changes in knowledge and attitudes were not entwined with changes in behavior or practices of people participated in the study. Lawrence et al., (1997) in their study entitled, "review of the knowledge, attitude and behaviors of university students

concerning HIV/AIDS” found significant differences in knowledge, attitude and sexual behaviors among universities in the Western countries. The authors highlighted importance of such studies in promoting HIV/AIDS programming and evaluation of key prevention strategies. The highlighted treatment of STIs, mitigation of reproductive health problems through continuous awareness raising and life skills training, peer dialogues and education, promotion and distribution of condoms.

With a total estimated population of 73.9 million (50.5% male) with more than 83% of the population living in the rural setting, the nation is a low income country with an economy largely depend on the agricultural sector. The first information about HIV/AIDS in Ethiopia was heard in 1984, while the first cases were reported in 1986. HIV has infected over all 1 of every 13 adult Ethiopians, while in the urban areas one out of every six adults (MOH, 2000 and Philipos, 2002 and 2006).The existing evidences have shown that the epidemic is more heterogeneous across the nation with more urban and females affected than rural areas and males. Urban epidemic is on decline in major towns while rural epidemic is leveling off. But small towns are becoming hotspots and could potentially bridge further spread of the urban epidemic to rural settings (FHAPCO, 2010). According to the national study finding(DHS,2006), the overall awareness, attitude and perception of self risk and caring for the infected community members was found good towards causative factors and prevention methods of HIV in Ethiopia. However, the overall dynamics of sexual behaviors and networks in the hotspots and their surrounding communities as well as in the most at risk population groups and the general population is not fully understood, requiring further investigation to uncover the epidemic and its driving factors.

Federal HIV/AIDS Prevention and Control Office (2007 and 2010) indicated that adult prevalence was 0% in 1984; 6.6-7.7% in 2001/02. According to the single point estimate of 2007, about 1,116,216 PLWHA were estimated in the country, which shows Ethiopia is home for the largest population of HIV-infected people in the world. About 134,450 Ethiopians had died of AIDS, of which, 54.5 % represents women. While out of 128,922 new infections of adults, 53.2% represent women. This indicates how the epidemic is significantly affecting women in Ethiopia. Young females are the most at risk individuals and affected segment of the population by the epidemic. The other higher risk social groups include commercial sex workers and their clients, uniformed services, truck and urban-city bus drivers, migrant/mobile workers, refugees and displaced people, high-school and university (UNAIDS, 2010; FHAPCO-MOH, 2007). The prevalence is estimated to be between 1.4% and 2.8% in 2009 (Ethiopian Health and Nutrition Research Institute, preliminary data from AIDS in Ethiopia, 7<sup>th</sup> Edition, cited in FHAPCO, 2010; DHS, 2006). Although there are improvements in knowledge, multiple hetero-sexual behaviors is still known to be the primary route of HIV transmission and propagation in Ethiopia. Though lack of adequate data on the prevalence, morbidity and impact of HIV/AIDS on public service as well as on the effectiveness of the sector, one can imagine how the epidemic is affecting productive age group, public sector and women in the country. Based the day-to-day observations and situation assessments made by some universities and colleges, higher learning institutions are considered as both the places of knowledge and skill as well as places of high-risk or vulnerability to HIV infection. This is so due to various reasons but mainly inadequately harmonized mainstreaming efforts, students’ attitude and behaviors related to the epidemic.

Education remains the most human intensive sector in Ethiopia. In 2009, there were about 18, 413, 837 million students,357,461 teachers, and more than 80,000 non teaching staff constituting more than 24% of the country's population. The figures for college and university students and staff are estimated to be 572384 and 16594, respectively (vide table below). Though comprehensive impact study not yet done in the education sector, there is general perception that the school community, particularly, in-school students and teachers are categorized under high risk social group vulnerable to HIV infection. According to the Ethiopian Ministry of Education (MOE, 2009).HIV/AIDS affects teachers, non teaching staff as well as learners, a decline in school enrolment, attrition, absenteeism, compromising quality of education are among the most visible impacts of the epidemic.

#### Student and teaching staff data in Ethiopia

(source: taken from 2009 HIV/AIDS policy briefing workshop presentation, MOE in 2002 E.C)

Intuitions	Students			Teachers		
	Male	Female	Total	Male	Female	Total
<b>1-8</b>	8,309,889	7,482,215	15,792,103	179,903	103,188	283,091
<b>9-12</b>	974,474	721,456	1,695,930	41,315	4,745	46,060
<b>TVET</b>	196937	158483	353420	9871	1845	11716
<b>College</b>	85166	57769	142935	1708	157	1865
<b>University</b>	315520	113929	429449	13077	1,652	14,729
<b>Total</b>	9,881,986	8,533,852	18,413,837	245,874	111,587	357,461

Ethiopia is implementing HIV/AIDS programs by employing multi-sectoral response strategies framed by the national and sectoral policies aligned to the country's overall development policy, strategies including the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and Growth and Transformation Plan (GTP) to significantly fighting against the epidemic. The programs give high priority for HIV prevention programs including knowledge, attitude and behavior change aspects of multi-sectoral mainstreaming responses. Despite positive changes in awareness and attitude, still there is lack of comprehensive knowledge (awareness about all aspects of transmission and prevention), attitude and mismatch between knowledge and practice, multiple concurrent risky sexual behaviors are known to be the major determinants of transmission and propagation of HIV and AIDS in Ethiopia (Philipos, 2010).

Ethiopian Civil Service College (ECSC), one of those very few higher learning institutions committed for recognizing the impact and enigma of the epidemic on public service performance and attempting to respond through institutionalized mainstreaming since 2004. To this end, the college has been aggressively engaged in mainstreaming HIV/AIDS management services into its programs acclimatized to national and sectoral HIV/AIDS policies and strategies of protecting its community and beyond through targeted interventions. Hence, this study, the first at its kind, attempted to identify the state of knowledge, attitude and behaviors or practices of actually utilizing HIV/AIDS management services among its community.

Lack of adequate knowledge among the larger society about risk factors fueling HIV transmission, ways of HIV prevention areas of concern that call for systematic exploration. Yet, no attempt has been made to explore the level of knowledge, attitude and behaviors of university community, including ECSC community hence lack of documentation on how far the universities or colleges addressed these issues. The study thus sought assessing HIV/AIDS related knowledge and attitude of ECSC community in seeking and actually utilizing HIV/AIDS management services of prevention, care, psychosocial services of the college. Specifically intended to explore knowledge and attitudes related to HIV/AIDS and services rendered at the college, and practices or behaviors of the college community.

## METHODS

The study employed mixed methods of quantitative and qualitative approaches for gathering first-hand information from randomly and purposively selected respondents and informants from different institutes and departments of the college. In social science research narratives, it is often argued that there is no perfect and solely best single research methodology, what is best is the use of mixed methods and triangulates the information, sources of data and instruments. Hence intention of using mixed methods in this study is to address the weakness of using one method/approach and source with a view of ensuring quality, reliability and validity of the information through triangulation.

The student and staff community of the college were the study population while sample population include random and systematically sampled student and staff community drawn from different institutes and work units of the college. For the purpose of this study, the researcher identified 30 work units as sources of primary data. Hence attempt was made to categorize the units into two clusters for ease of questionnaire administration, hence grouped academic institutions into ten for those engaged in education business services for students enrolled in to masters and undergraduate programmes while 20 as support units so as to identify and select staff community. Hence, the use of mixed methods, techniques, instruments and data sources is justifiable and considered as the strength of this study, the first at its kind in the college. In this regard, multi-stage sampling techniques were used to identify institutes, work units and business processes from academic, management and administrative work units and institutes of the university. Mixed sampling techniques (i.e. systematic, random and stratified sampling) were used to identify and actually select sample respondents from staff and student community from different sections or departments of the college. Whilst, purposive and judgmental sampling techniques were employed to identify key informants from staff and students for qualitative data with a view of validating quantitative data collected from respondents through structured questionnaire. The study was supported by observations. List of students from admission and registration office and relevant departments or work units while list of staff community from human resource department were the major sampling frames to identify and draw sample respondents, which is two hundred fifty. The units of analysis of the study are both the student and staff community.

The study utilized both published and unpublished materials. Whilst, primary data were gathered by using structured survey questionnaire, key informant and observations from sample community drawn from different institutes, centers, business processes, units and departments. Secondary data (published and un-published, local and international) sources were used to supplement primary data. The field findings and data presentation was made using frequency tables, bar graphs and pie charts. Descriptive statistics and SPSS version 15.0 were used to analyze and present quantitative data and findings. Whilst the matically organized content analysis was made for qualitative data.

The study adds values on how social research can contribute to the achievement of promoting evidence based actions

of mainstreaming and promoting safer sexual behavior in detecting the major determinant factors affecting knowledge and attitude of university community, and monitoring changes in behaviors over time. Moreover, the findings will document the result as baseline information so that further study could be done in the public service sectors including higher learning institutions, and other sectors, organizations and individuals working on HIV/AIDS.

With regards to its scope or delimitation, the study was conducted on selected ECSC community members by excluding regular students admitted after February 2011, all evening and distance program students. In addition, it excluded expatriate and temporarily employed staff. It has also limited itself to knowledge, attitude and behaviors related to HIV/AIDS management services of the college for strategic importance.

The study was conducted after securing approval of Institutional Review Committee of the Ethiopian Civil Service University and after obtaining the permission from the Institutes/Departments from which the subjects were selected. The confidentiality of information was maintained by excluding personal identifiers and data were collected after securing informed consent from every respondent.

## RESULTS

As mentioned in the first part of this paper, this cross-sectional study was conducted between February and June 2011 where four category of 250 respondents were expected to participate and 238 actually responded to the structured questionnaire(see table 1 below) on the knowledge, attitude and behavior related variables of the assessment.

**Table 1.** Response rate for questionnaire

S.NO	Respondent category	Questionnaire distributed	Questionnaire completed and returned	Questionnaire not returned
1	Undergraduate students	108	105	3
2	Postgraduate students	58	54	4
3	Admin staff	56	54	2
4	Academic staff	28	25	3
<b>Total</b>	<b>4</b>	<b>250</b>	<b>238(95%)</b>	<b>12(5%)</b>

Source: Researcher's Survey, March 2011

As can be seen from the table above, out of 250 respondents, 95% correctly filled out and returned the questionnaire to the research, of which the large majority (105, 44.1%) were represented by regular students from undergraduate program, followed by postgraduate students and administrative staff.

With the purpose of supporting and enriching questionnaire responses with qualitative data, an attempt was made to hold eight key informants interview sessions with purposively identified and knowledgeable staff and student key informants, yet the interview was held with only six informants on key issues relating to attitude and practices(behaviors) of the community towards HIV/AIDS and the services. This was done with four student representatives drawn from peer educators and anti-AIDS Club while two staff members who work with student service and clinic. In addition, observation of student clinic service, places of condom distribution, IEC/BCC materials demonstration and message posting boards was observed to check the state of information dissemination were available, accessible and utilized by the community members.

## Socio-demographic characteristics of respondents

**Table 2.** Respondents by sex and category

S.NO	Respondent category	M	F	T
1	Undergraduate students	75	30	105
2	Postgraduate students	42	12	54
3	Admin staff	25	29	54
4	Academic staff	23	2	25
<b>Total</b>	<b>4</b>	<b>165(69.3%)</b>	<b>73(30.7%)</b>	<b>238 (100%)</b>

Source: Researcher's Survey, March 2011

Table 2 depicts that the large majority of respondents were male (165, 69.3%) and they were from undergraduate program, followed by 42, 17.6% student community from postgraduates. Out of 73(30.7%) female respondents, the majority were participated in the study from undergraduate students, 30(12,6%) followed by administrative female staff(29, 12.2 %) and the participation(in the study) of female academic staff and female postgraduates were lower

than their counter parts. This study assert that relatively small number of respondents from females (student and academic female staff) might be associated with the size of population of these groups in the ECSC community than sampling error.

### ECSC Community Knowledge about HIV/AIDs and related services

**Table 3.** Respondents knowledge about the question “Is HIV&AIDS are one and the same?”

Respondents category			Frequency	Percent
Postgraduate (masters program ) student	Yes	Yes	7	13.0
		No	43	79.6
		Total	50	92.6
		Missing	4	7.4
	Total		54	100.0
Administrative staff	Yes	Yes	9	16.7
		No	38	70.4
		Total	47	87.0
		Missing	7	13.0
	Total		54	100.0
undergraduate student	Valid	Yes	20	19.0
		No	77	73.3
		Total	97	92.4
		Missing	8	7.6
	Total		105	100.0
Academic staff	Valid	Yes	3	12.0
		No	22	88.0
		Total	25	100.0

**Source:** Researcher’s Survey, March 2011

The results in the table above indicate that among the student respondents, more postgraduate students answered that HIV and AIDS were not one and the same whereas among the staff community, more academic staff said that HIV and AIDS were not one and the same. Accordingly, 79.6% of the postgraduate student respondents reported that HIV and AIDS were not one and the same whereas 13% of the postgraduates responded that HIV&AIDS were one and the same, which is clear indication of lack of adequate knowledge and awareness among these groups.

The large majority, 88.0% of academic staff said that HIV&AIDS were not one and the same whereas 12.0% of Academic staff answered that HIV and AIDS were one and the same. This implies that the majority of post-graduate students and staff respondents had good and correct knowledge about HIV and AIDS.

**Table 4.** Knowledge of ECSC Community about HIV/AIDs and ECSC services

Variables	Undergraduate		Postgraduate		Admin staff		Academic staff	
	Yes N ( %)	NO N( %)	Yes N( %)	NO N (%)	Yes N ( %)	NO N (%)	Yes N (%)	NO N (%)
Ever Heard about HIV&AIDS	79( 75.2)	23(22)	29(54)	25(46.3)	42(77.8)	10(18.5)	23(92)	2(8)
HIV&AIDS are one and the same	7 (13)	43 (79)	20(19)	77( 73.3)	9(16.7)	38(70.4)	3(12)	22(88)
Heard about condoms in ECSC	100(95)	4(4)	47(87)	3(5.6)	45(83.3)	4(7.4)	24(96)	1(4)
Place to go for VCT	36(34.3)	68(64.5)	11(20.4)	40(74.1)	45(83.3)	4(7.4)	24(96)	1(4)

**Source:** Researcher’s Survey, March 2011

Table 4 depicts summary of data on the major variables of the research questions, which is presented below.

Majority of respondents (74.2%) have heard about HIV &AIDS in the ECSC. The Kruskal-Wallis Test is 0.001, which is less than 0.05. This shows that there is a significant relationship between the categories of the respondents and knowledge about HIV & AIDS in the ECSC. Whereas 22.5% undergraduate research respondents had never heard about HIV and AIDS in the ECSC. Among the staff respondents 92.0% research respondents had ever heard about HIV/AIDs whilst eight percent of the respondents had never heard of HIV within the ECSC.

Respondents’ view was compiled on the question(see table above) “ **HIV and AIDS are one and the same?**” All most all respondents 82.2% have said HIV&AIDS are not one and the same. The Pearson Chi-Square Test is (0.647, 0.195, 0.242) shows insignificant differences among the entire respondent categories (graduate and under graduate students and administrative and academic staff), marital status and sex category, respectively.

With regard to knowledge about a place where to go for HIV testing (vide table 3.4) the majority of the respondents

among the category (graduate and under graduate students and administrative and academic staff) were not in a position to know a place where ECSC community can go to get test for HIV testing even though almost all respondents have heard about HIV testing.

Almost all respondents have heard about condom. A major information sources about condom is mass media (68.1%) and 52.2% training workshops at ECSC respectively were identified as a source of information about condom.

Pertaining to the question of a place where to access condoms, among the respondents that have the information of condom that obtain in the ECSC campus, most of the students the graduate and undergraduate have known the place or person in the college that the can access/can collect condom 72.0% and 75.8%, respectively.

The major source of condom for staff and students among respondents was ECSC's corridors, around dormitories, clinic or offices. However, half of the administrative and 80% of the academic staff haven't had the information where the condom is available in the campus.

Regarding the question related to transmission routes of HIV, (98.1%) of respondents declared unprotected sexual intercourse as the major route of HIV transmission. Whilst sharing contaminated sharp instruments, contact with infected blood and from infected mother to child (85.4%, 77.5%, and 71.5%) as the second, third and fourth transmission routes of HIV transmission, respectively.

Table 5. ECSC community knowledge about place or person they can obtain condoms

Variable:	Undergraduate (105)		Postgraduate (54)		Admin staff(54)		Academic staff(25)	
	Yes N( %)	NO N( %)	Yes N( %)	NO N( %)	Yes N ( %)	NO N ( %)	Yes N (%)	NO N (%)
Do you know any place/person from which you can obtain condoms in the ECSC?	79(75.2)	26(24.8)	38(70.4)	16(29.6)	23(42.6)	31(57.4)	5(20)	20(80)

Source: Researcher's Survey, March 2011

The results in the table above indicate that among the student research respondents more postgraduate student community did not know any place or person from which they could obtain condoms in the ECSC. Whereas among the staff respondents, more academic staff did not know any place or person from which they could obtain condoms in the ECSC. Whilst 28.0% of the postgraduate student respondents did not know any place or person from which they could obtain condoms in the ECSC but 72.0% of them knew places and persons they could obtain condoms in the ECSC. Among staff respondents 80.0% of the Academic staff did not know any place or person from which they could obtain condoms in the ECSC whereas 20.0% of the Academic staff knew places and persons they could obtain condoms in the ECSC.

Table 6. Respondent's sources of condoms (access) for students and staff(see the following two tables)

Source of condoms for students				SOURCE OF CONDOM PIECES			
				ECSC( corridors, around dormitories, clinic or offices)	Friends or colleagues	Shops/Kiosks around ECSC	Other
student	Sex	Male	Count	53	12	36	12
			% of Total	44.5%	10.1%	30.3%	10.1%
	Female	Count	15	2	5	6	
		% of Total	12.6%	1.7%	4.2%	5.0%	
	Total	Count	68	14	41	18	
		% of Total	57.1%	11.8%	34.5%	15.1%	

Source: Researcher's Survey, March 2011

As indicated in the table above, the majority of the respondent's sources of condoms (access to pieces of condoms) is at the ECSC (corridors, around dormitories, clinic). 44.5% and 12.6% of male and female respondent's source of information is at the ECSC, respectively.

While table 7 below portrays the majority (22, 49.9%.male and 24, 49% females) of staff's source(access) to condoms are shops or kiosks than ECSC campus outlets. While some staff (10, 20.4% both male and females) members' source of condoms is ECSC). This clearly indicates that access to condoms and perceived utilization is relatively low for staff than student community.



Table 7. Sources of condoms for staff

			<b>SOURCE</b>			
Source of condoms for staff			ECSC(corridos, around dormitories, clinic or offices)	Friends or colleagues	Shops/Kiosks around ECSC	Other
Staffs	Sex	Male	Count 8	3	22	11
			% of Total 16.3%	6.1%	44.9%	22.4%
		Female	Count 2	0	2	8
			% of Total 4.1%	.0%	4.1%	16.3%
		Total	Count 10	3	24	19
			% of Total 20.4%	6.1%	49.0%	38.8%

Source: Researcher's Survey, March 2011

Table 8. ECSC community knowledge about VCT in ECSC(N=238)

Variable	Undergraduate (105)		Postgraduate (54)		Admin staff(54)		Academic staff(25)	
	Yes N( %)	NO N( %)	Yes N( %)	NO N( %)	Yes N( %)	NO N( %)	Yes N( %)	NO N( %)
Have you ever heard about HIV test?	89(84.8)	16(15.2)	42(77.8)	12(22.2)	45(83.3)	9(16.7)	5(20)	20(80)

Source: Researcher's Survey, March 2011

Of all those ECSC community (students and staff) who heard about HIV and AIDS in the ECSC, 97(43.5%) and 63(28.3%) are married and single, respectively while 5(2.2%) are divorced .It was found that there is no significant change(Chi-square values are greater than 0.05) among the respondents and their marital status on the question under consideration.

Table 9. Respondents' knowledge about HIV transmission routes and prevention strategies

Variables	All students		All staff	
	#	%	#	%
<b>Knowledge about routes of HIV transmission</b>				
unprotected sexual intercourse	154	27.8%	72	28.5%
sharing contaminated sharp instruments such as razor blade& needles	133	24.0%	58	22.9%
Contact with infected blood	121	21.8%	55	21.7%
Mosquito bite	13	2.3%	11	4.3%
Shaking hands, learning/working together with someone who has HIV in his/her blood	9	1.6%	5	2.0%
Mother to child	113	20.4%	48	19.0%
Other	11	2.0%	4	1.6%
<b>Knowledge about HIV prevention methods</b>				
Abstaining	117	30.5%	45	29.6%
Being faithful	102	26.6%	40	26.3%
properly using condoms	115	29.9%	51	33.6%
VCT	42	10.9%	15	9.9%
Other	8	2.1%	1	0.7%

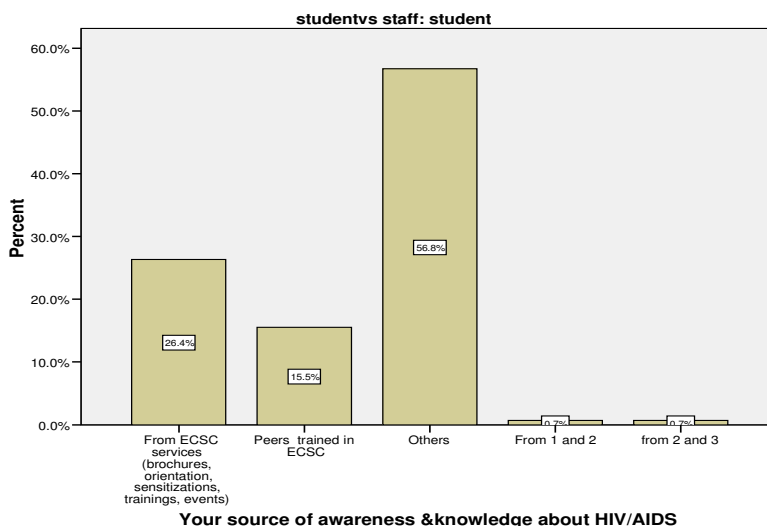
Source: Researcher's Survey, March 2011

The table above shown that the overwhelming majority of respondents, from both community (student and staff) reported that unprotected sex, sharing sharp instruments and contact with infected or unscreened blood were the major causes of HIV transmission, ranked as first, second and third causes. The study came up with similar findings of other studies( Bimbola&Florence, 2008; Lawrence, Sara & Connie, 1997; Rikka and Osmo; FHAPCO, 2010).The table further portrays that abstaining, being faithful and use of condoms as the first, second and third major HIV prevention mechanisms and approaches. This was declared by the majority of student and staff respondents. Other studies have also produced similar studies (Bimbola and Florence, 2008; Lawrence et al., 1997; Rikka and Osmo 1999; DHS,2002; Philipos, 2006).

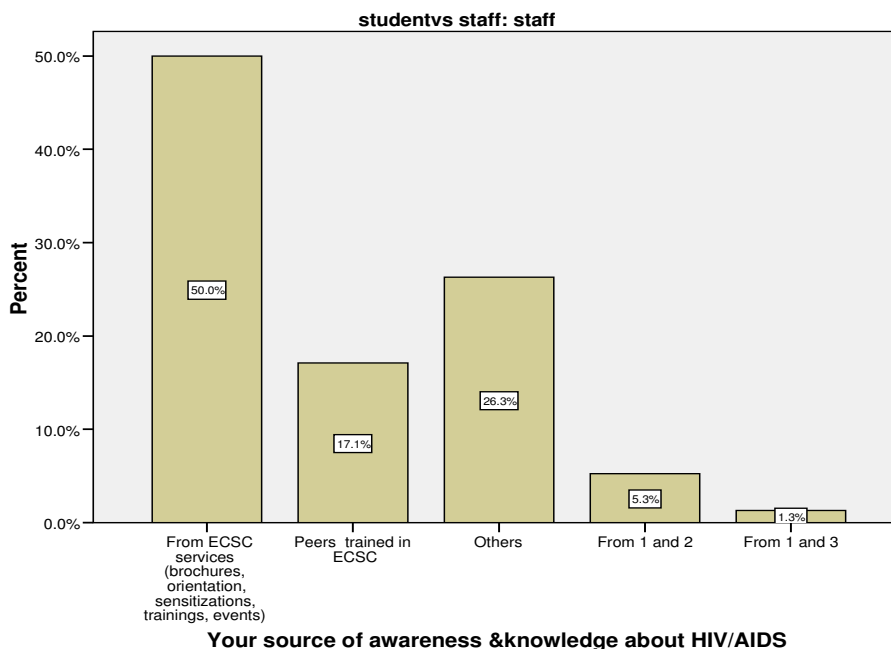
The figure below depicted that the large majority of student respondents' source knowledge and awareness about

HIV/AIDS depicted as “other” which meant media sources (FM 97.1, Television and news papers). Whilst the second large majority of respondents received information from ECSC HIV/AIDS Management service packages.

The majority of key informants further supported that now adays students are using their mobile with FM radio channel as a source of entertainment and also use same as a source for HIV related information. They also declared that many students are busy with study and not readily showing up for many peer education and dialogue events and sessions organized by peers as well as HIV/AIDS management unit initiated sessions.



**Figure 4.** Students' source of awareness and knowledge about HIV/AIDS  
Source: Researcher's Survey, March 2011



**Figure 5.** Staffs' source of awareness and knowledge about HIV/AIDS

Source: Researcher's Survey, March 2011

Contrary to students' response, the large majority of staff respondents' source knowledge and awareness about HIV/AIDS was reported as “the ECSC HIV/AIDS services” while the next large majority of staff reported that “other” sources like media as their source of information about HIV/AIDS. Similarly, key informants contend that now adays, not only the college services on HIV/AIDS awareness but medial should also reach the public. Hence there are many information outlets other than college based information service on the subject. Other studies (DHS 2006, Lawrence et al., 1997; Rikka and Osmo 1999) have also came up with similar findings on the source of information about HIV/AIDS.

**Table 10.** Respondents' view for the question: Would you like to know your HIV status?

Respondents category			Frequency	Percent
Postgraduate (master program) student	Valid	Yes	40	74.1
		No	11	20.4
		Total	51	94.4
Administrative staff	Missing	System	3	5.6
		Total	54	100.0
Administrative staff	Valid	Yes	41	75.9
		No	8	14.8
		Total	49	90.7
undergraduate student	Missing	System	5	9.3
		Total	54	100.0
undergraduate student	Valid	Yes	86	81.9
		No	15	14.3
		Total	101	96.2
Academic staff	Missing	System	4	3.8
		Total	105	100.0
Academic staff	Valid	Yes	22	88.0
		No	2	8.0
		Total	24	96.0
Academic staff	Missing	System	1	4.0
		Total	25	100.0

Source: Researcher's Survey, March 2011

The results in the table above indicate that more respondents including students and staff wanted to know their HIV status. Accordingly, about 74.1% of the postgraduate student respondents wanted to know their HIV status whereas 85.1% of the undergraduate student research respondents wanted to know their HIV status. Among the staff research respondents 83.7% of the Administrative staff research respondents wanted to know their HIV status whereas 91.7% of the Academic staff research respondents wanted to know their HIV status.

**Table11.** Respondents' practice of casual sex

Student vs staff				Have you ever had sex with casual partners?		
student	Sex	Male	Count	Yes	No	No response
			% of Total	40	56	10
staff	Sex	Male	Count	28.8%	40.3%	7.2%
			% of Total	7	26	0
student	Total	Female	Count	5.0%	18.7%	.0%
			% of Total	47	82	10
staff	Total	Female	Count	33.8%	59.0%	7.2%
			% of Total	15	28	2
student	Total	Male	Count	21.4%	40.0%	2.9%
			% of Total	6	18	1
staff	Total	Female	Count	8.6%	25.7%	1.4%
			% of Total	21	46	3
student	Total	Male	Count	30.0%	65.7%	4.3%
			% of Total	47	82	10

Source: Researcher's Survey, March 2011

The table above depicts that many of the respondents ever had sex with casual partners while significant number of them had such partnership, considered as aspect of risk behavior.

**Table12.** Respondents' practice of having multiple sexual partners

<b>student vs staff</b>				<b>How many sexual partners have you had in the past 3 months</b>				
				None	One	two-three	three-five	more than 5
Student	Sex	Male	Count	53	43	13	1	3
			% of Total	36.3%	29.5%	8.9%	.7%	2.1%
	Female	Count	12	18	2	0	1	
		% of Total	8.2%	12.3%	1.4%	.0%	.7%	
	Total	Count	65	61	15	1	4	
		% of Total	44.5%	41.8%	10.3%	.7%	2.7%	
Staff	Sex	Male	Count	22	18	6	1	1
			% of Total	29.3%	24.0%	8.0%	1.3%	1.3%
	Female	Count	11	13	2	0	1	
		% of Total	14.7%	17.3%	2.7%	.0%	1.3%	
	Total	Count	33	31	8	1	2	
		% of Total	44.0%	41.3%	10.7%	1.3%	2.7%	

Source: Researcher's Survey, March 2011

**Table 13.** Respondents' behavior on frequency of casual sex

<b>Student vs staff</b>				<b>How many times have you had casual sex in the last three months?</b>			
				None	two-three	three-six	more than 6
student	Sex	Male	Count	80	22	5	5
			%	55.9%	15.4%	3.5%	3.5%
	Female	Count	22	7	1	1	
		%	15.4%	4.9%	.7%	.7%	
	Total	Count	102	29	6	6	
		%	71.3%	20.3%	4.2%	4.2%	
Staff	Sex	Male	Count	32	7	3	4
			%	45.1%	9.9%	4.2%	5.6%
	Female	Count	17	3	2	3	
		%	23.9%	4.2%	2.8%	4.2%	
	Total	Count	49	10	5	7	
		%	69.0%	14.1%	7.0%	9.9%	

Source: Researcher's Survey, March 2011

In reference to tables 12 and 13, large majority of student and staff respondents had less than two times they have had casual sex in the last three months while few attempted to have such risky sexual behaviors between three to six times.

**Table 14.** Respondents' view on the correct and consistent use of condoms

<b>Student vs staff</b>				<b>How many of these encounters did you use condoms correctly and consistently?</b>			
				none of them	two-four	most of them	all of them
Student	Sex	Male	Count	60	8	7	15
			% of Total	53.6%	7.1%	6.3%	13.4%
	Female	Count	15	2	4	1	
		% of Total	13.4%	1.8%	3.6%	.9%	
	Total	Count	75	10	11	16	
		% of Total	67.0%	8.9%	9.8%	14.3%	
Staff	Sex	Male	Count	22	5	2	8
			% of Total	37.9%	8.6%	3.4%	13.8%
	Female	Count	11	3	1	6	
		% of Total	19.0%	5.2%	1.7%	10.3%	
	Total	Count	33	8	3	14	
		% of Total	56.9%	13.8%	5.2%	24.1%	

Source: Researcher's Survey, March 2011

Table 14 depicts more about 33(56.9%) of staff and 75(67%) student respondents never used condoms correctly and consistently in their casual sex while large majority did use condoms.

**Table 15.** ECSC Community response to the question: Have you ever been tested for HIV?

Student vs staff			Have you ever been tested for HIV?			
			yes	NO	NO Response	
student	Sex	Male	Count	64	45	3
			% of Total	44.1%	31.0%	2.1%
		Female	Count	23	9	1
		% of Total	15.9%	6.2%	.7%	
	Total	Count	87	54	4	
		% of Total	60.0%	37.2%	2.8%	
Staff	Sex	Male	Count	28	19	1
			% of Total	37.3%	25.3%	1.3%
		Female	Count	19	8	0
		% of Total	25.3%	10.7%	.0%	
	Total	Count	47	27	1	
		% of Total	62.7%	36.0%	1.3%	

Source: Researcher's Survey, March 2011

The table above shows 62.7% and 60% of staff and student respondents, respectively been tested for HIV while 36% and 37.2% of staff and student sample respondents did not attempt to take HIV test. Yet, some respondents did not volunteer to respond to the question.

### ECSC Community attitude towards HIV and AIDS and people infected or affected

The overwhelming majority of sample respondents (students and staff community) declared that they would like to know their HIV status after being voluntarily tested for the antibody, hence they have favorable attitude towards being tested. Almost all sample respondents don't believe that college students are free from risks and vulnerability to HIV.

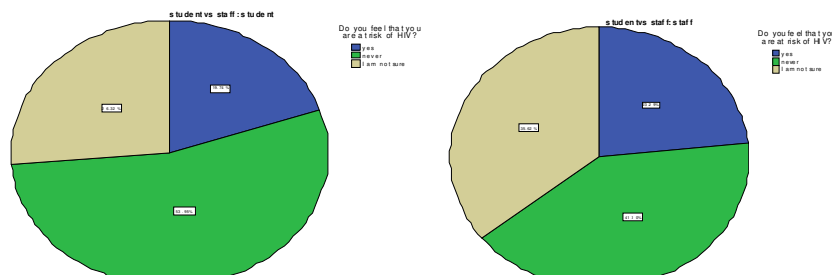
**Table16.** Do you feel that you are at risk of HIV (being infected)?

	Yes	NO
Students	M: 65 ( 29.3%) F: 19 ( 8.6%)	M: 50(22.5%) F: 15(6.8%)
Staff	M: 29 (13.1%) F: 10 (4.5 %)	M: 19 (8.6%) F: 15 (6.8%)
Total(222)	123(55.4%)	99(44.6%)

Source: Researcher's Survey, March 2011

The above table (and pie charts below) portrays that the large majority of sample respondents 123(55.4%) declared that they are at risk of being infected by HIV, of which the overwhelming majority are men. This shows that most of the respondents (students or staff; married or single) have never felt that they are at risk of HIV. The Kruskal-Wallis Test is 0.846, which is greater than 0.05. This shows that there is no significant differences between marital status, sex, age and category of respondents with the feeling that at risk of HIV.

Whilst, out seventy five student respondents, 29 staff community believed that "Yes" they can protect themselves from HIV by abstaining from sexual intercourse while about 15 administrative staff(11%) reported "NO" .



**Figure 6.** Students' and staff perception towards risks of HIV

**Table 17.** Attitude of ECSC community towards those members infected or living with HIV

Sex disaggregated categorization of respondents		ECSC community member who has HIV in his/her blood should be isolated from others				
		Strongly agree	Agree	Neutral	Disagree	strongly disagree
Student	T	10(6.8%)	5(3.4%)	21(14.4%)	32(21.9%)	<b>78(53.4%)</b>
	M	6(4.%)	4(2.7%)	15(10.3%)	24(16.4%)	64(43.8%)
	F	4(2.7%)	1(0.7%)	6(5.5%)	8(5.5%)	14(9.6%)
Staff	T	3(4.5%)	5(7.5%)	8(11.9%)	12(17.9%)	<b>39(58.2%)</b>
	M	3(4.5%)	0	5(7.5%)	8(11.9%)	30(44.8%)
	F	0	5(7.5%)	3(4.5%)	4(6%)	9(13.4%)
Sex disaggregated categorization of respondents		<b>Student or staff who has HIV in his/her blood should keep his/her status secret to the ECSC community</b>				
		Strongly agree	Agree	Neutral	Disagree	strongly disagree
Student	T	40(26.7%)	16(10.7%)	25(16.7%)	31(20.7%)	38(25.3%)
	M	30(20%)	12(8%)	17(11.3%)	24(16%)	32(21.3%)
	F	10(6.7%)	4(2.7%)	8(5.3%)	7(4.7%)	6(4%)
Staff	T	18(25.4%)	9(12.7%)	9(12.7%)	13(18.3%)	22(31%)
	M	10(14.1%)	5(7%)	7(9.9%)	10(14%)	15(21.1%)
	F	8(11.3%)	4(5.6%)	2(2.8%)	3(4.2%)	7(9.9%)

Source: Researcher's Survey, March 2011

The above shows the majority of respondents [78(53.4%) of students and 39(58.2%) of staff] have caring attitude for ECSC student/staff who has HIV in his/her blood. However, significant number of sample respondents, 40(26.7%) students and 18(25.4%) staff, favors keeping HIV status as secret than being disclosed for someone.

**Table 18.** If your peer of work or class mate got infected with HIV, would you want it to remain a secret?

Respondents	Yes	NO
Students	M:79(36.7%)	M: 33(15.2%)
	F: 22(10.1 %)	F: 13(6%)
Staff	M: 27(12.4%)	M: 20 (9.2%)
	F: 19(8.8 %)	F: 4 (1.8%)
Total(217)	147(67.7%)	70(32.7%)

Table 18 shows that the large majority of respondents (147, 67.7%), particularly men, have a kind of attitude they wanted their peers or classmates (if they got infected) remain secret than disclosing their HIV status. Hence, the overwhelming majority of sample respondents declared that they favor secrecy of HIV status of if their classmates and colleagues get infected with HIV.

### Practices/Behaviors of ECSC Community in seeking and utilizing HIV/AIDS Management services

**Table 19.** Respondents' practice of condom use

Sex disaggregated categorization of respondents				Have you ever used condoms?		
				Yes	No	No response
student	Sex	Male	N	59	47	10
		%		38.8%	30.9%	6.6%
	Female	N	11	20	5	
		%		7.2%	13.2%	3.3%
Total		N	70	67	15	
		%		46.1%	44.1%	9.9%
Staff	Sex	Male	N	26	18	3
		%		36.1%	25.0%	4.2%
	Female	N	10	15	0	
		%		13.9%	20.8%	.0%
Total		N	36	33	3	
		%		50.0%	45.8%	4.2%

Source: Researcher's Survey, March 2011

The overwhelming majority of sample respondents (vide table 3.18) used condoms yet almost equal number of respondents never used it as a means of preventing risks of HIV infection.

**Table 20.** Respondents' practice of having casual sex partners

<b>Students vs Staff</b>				<b>Have you ever had sex with casual partners?</b>		
				Yes	No	No response
Student	Marital status	single	Count	21	34	2
			% of Total	14.9%	24.1%	1.4%
		Married	Count	27	48	7
			% of Total	19.1%	34.0%	5.0%
		Divorced	Count	0	2	0
			% of Total	.0%	1.4%	.0%
	Total	Count	48	84	9	
		% of Total	34.0%	59.6%	6.4%	
Staff	Marital status	single	Count	10	16	0
			% of Total	14.9%	23.9%	.0%
		Married	Count	11	26	2
			%	16.4%	38.8%	3.0%
		Divorced	Count	0	1	1
			%	.0%	1.5%	1.5%
	Total	Count	21	43	3	
		%	31.3%	64.2%	4.5%	

**Source:** Researcher's Survey, March 2011

**Table 21.** Respondents' practice of having number of casual sex partners

<b>Student vs staff</b>				<b>How many sexual partners have you had in the past 3 months</b>				
				None	One	two-three	three-five	more than 5
Student	Sex	Male	Count	53	43	13	1	3
			% of Total	36.3%	29.5%	8.9%	.7%	2.1%
		Female	Count	12	18	2	0	1
			% of Total	8.2%	12.3%	1.4%	.0%	.7%
		Total	Count	65	61	15	1	4
			% of Total	44.5%	41.8%	10.3%	.7%	2.7%
Staff	Sex	Male	Count	22	18	6	1	1
			% of Total	29.3%	24.0%	8.0%	1.3%	1.3%
		Female	Count	11	13	2	0	1
			% of Total	14.7%	17.3%	2.7%	.0%	1.3%
		Total	Count	33	31	8	1	2
			% of Total	44.0%	41.3%	10.7%	1.3%	2.7%

**Source:** Researcher's Survey, March 2011

Table 20 and 21 depict many respondents demonstrated good sexual behavior of having none or one sexual partner in the last three months. However, about thirty respondents had two-more than sexual partners during the last three months, which indicates incidence and prevalence of risky sexual behavior that mismatching with relatively better and improving awareness, knowledge and attitude towards HIV/AIDS and its management services. Key informant interview result (with anti-ADS club members and peer educators) support this finding as significant number of female and male students engage in such risky practices, especially during first semester entry, during exams (as a means to cope with stress of study or coping with exam related challenges and stresses) and breaks as well as when graduation ceremony approaching.

The reported risky sexual behavior was common, with varying degree, but regardless of respondents marital status and related demographic and personal characteristics and statuses (e.g. see table 3.20). This study finding came up with similar evidences documented by many authors and researchers in the field (Xiaoming et al., 2004; Nigatu & Seman, 2011; Yusuf, 2007; Yohannis Fitaw and Alemayehu Worku, 2002; Lawrence, Sara and Connie, 1997; Rikka and Osmo, 1999; DHS, 2006)

**Table 22.** Respondents' practice of having casual sex in the last 3 months

Student vs staff				How many times have you had casual sex in the last three months			
				None	two-three	three-six	more than 6
student	Sex	Male	Count	80	22	5	5
			% of Total	55.9%	15.4%	3.5%	3.5%
	Female	Count	22	7	1	1	
		% of Total	15.4%	4.9%	.7%	.7%	
	Total	Count	102	29	6	6	
		% of Total	71.3%	20.3%	4.2%	4.2%	
Staff	Sex	Male	Count	32	7	3	4
			% of Total	45.1%	9.9%	4.2%	5.6%
	Female	Count	17	3	2	3	
		% of Total	23.9%	4.2%	2.8%	4.2%	
	Total	Count	49	10	5	7	
		% of Total	69.0%	14.1%	7.0%	9.9%	

Source: Researcher's Survey, March 2011

As can be seen from the table above, the majority of respondents committed no casual sex three months before this study was conducted. Yet, quite significant number of the respondents (both male and female, staff and students) had more than three casual sexual partnerships. Surprisingly, the study found about 13 respondents practiced casual sex for more than six times within three months, which is clear indication of the prevalence of risky sexual behavior. Many studies have similar findings (Nigatu and Seman, 2011; Yusuf, 2007; Philipos, 2006, Yohannis and Alemayehu, 2002; Lawrence, Sara and Connie, 1997).

**Table 23.** Respondents' practice of using condoms with casual sex partners

Student vs staff				How many of these encounters did you use a condom			
				none of them	two-four	most of them	all of them
student	Sex	Male	Count	60	8	7	15
			% of Total	53.6%	7.1%	6.3%	13.4%
	Female	Count	15	2	4	1	
		% of Total	13.4%	1.8%	3.6%	.9%	
	Total	Count	75	10	11	16	
		% of Total	67.0%	8.9%	9.8%	14.3%	
Staff	Sex	Male	Count	22	5	2	8
			% of Total	37.9%	8.6%	3.4%	13.8%
	Female	Count	11	3	1	6	
		% of Total	19.0%	5.2%	1.7%	10.3%	
	Total	Count	33	8	3	14	
		% of Total	56.9%	13.8%	5.2%	24.1%	

Source: Researcher's Survey, March 2011

Table 23 declared that many student respondents did not attempt using condoms during their casual sexual encounters, which is clear indication of high incidence and prevalence of risky sexual behaviors among sample student community. In fact, this was done regardless of their year of stay in the college, religiosity, age being postgraduate or undergraduate and, being married or single. The table further indicates higher risky sexual practice among men, compared to their counter parts, though the total number of female respondents is significantly lower than men.



**Table 24.** Respondents' view for the question "Have you ever been tested for HIV?"

Sex disaggregated categorization of respondents				Reported behavior than actually observed*		
student	Sex	Male	Count	yes	no	NO Response
				% of Total	64	64
		Female	Count	44.1%	31.0%	2.1%
			% of Total	23	9	1
	Total		Count	15.9%	6.2%	.7%
			% of Total	87	54	4
Staff	Sex	Male	Count	60.0%	37.2%	2.8%
			% of Total	28	19	1
		Female	Count	37.3%	25.3%	1.3%
			% of Total	19	8	0
	Total	Count	25.3%	10.7%	.0%	
			% of Total	47	27	1
			Count	62.7%	36.0%	1.3%

Source: Researcher's Survey, March 2011

The table shows that many student and staff respondents have done taking VCT, particularly men. The major places of VCT were hospitals and health centers outside ECSC. Three key informants supported this data and reflected that many students go for VCT on their own initiatives but private facilities.

**Table 25.** ECSC community members reason for HIV Test

Respondent category	Respondents' Reasons for HIV Test				
	I had reproductive health problems(e.g STIs)	To prevent myself& my partner from risks of HIV infection	Having chronic and recurrent illness	Thinking that my partner might have risk	Other
Students	M: 28(40%) F: 7(10%)	M: 39(55.7%) F: 6 (8.6%)	M: 4 ( 5.7%) F: 1 (1.4%)	M: 15 (21.4%) F: 3(4.3%)	M: 10(14.3%%) F: 0 (0)
Staff	M: 16 (44.4%) F: 4 (11.1%)	M: 16 (44.4%) F: 9 (25%)	M: 1 (2.8%) F: 0(0)	M: 4 (11.1%) F:1 (2.8 %)	M:2 (5.6 %) F: 1(2.8 %)

Source: Researcher's Survey, March 2011

Table 25 shows that large number of sample respondents justified that they did HIV test mainly to protect themselves while significant number of them reported that they had history of reproductive health problem related reasons. Key informants interview (KII) result supported this finding that students often take voluntary self initiated test to protect self or due to RH problems like sexually transmitted diseases though the incidence and prevalence of STIs is not as such significantly high in the student clinic. But one of the key informants pointed out that students, if they have STI history and never tested for HIV so far, they don't show up and inquiry for STI treatment or VCT related services. In fact, very few students were willing to take such services.

## DISCUSSION

The study found that the majority of students and staff heard about and have good awareness on HIV/AIDS in the ECSC through its prevention education and training programs, community dialogues, care and psychosocial support. Whilst the large number of respondents heard and know about HIV test, condoms mainly from media sources followed by aggressively conducted HIV/AIDS training workshops in the college; both male and female respondents knew where they can access services and information like pieces of condoms and voluntary counseling and testing (VCT).

The study found no correlation between being postgraduate and undergraduate student; being married or single. Staying long for study purpose (e.g. students stay for 3-5yrs in the college) has no significant correlation with risks. ECSC community was found to have positive attitudes towards someone who has HIV in his/her blood. It was found that all respondents (married or unmarried, those who use or not use condoms) never perceive they are at risk for HIV. For instance, the use of condoms, unsafe or risky sex, causal or multiple concurrent sexual partnerships were found among all religious groups, married staff and undergraduate and postgraduate students. However, compared to female students and staff, males were found more exposed to unsafe sex or not continually using condoms. Married and unmarried ECSC community reported that they had unprotected multiple sexual practices, and there is no difference in such risky practices with religious denomination. Paradoxically, it was found that some respondents don't even know the

difference between HIV and AIDS, never heard about it; they misconceive and associate condom use with family and religious beliefs. Qualitative data supports this finding.

Although significant number of the sample respondents were willing to take and actually took VCT to know their status, identified abstinence and condoms as major means for HIV prevention. Large number of married staff and students prefer use of condoms as the major HIV preventive means. Contrary to good awareness and knowledge about HIV/AIDS and its routes of transmission, still many respondents had negative attitude towards condoms and they lack adequate and correct information hence unable to practically utilize HIV/AIDS management services such as awareness raising trainings, community and peer conversations, condom use and the like.

## CONCLUSIONS

There are positive changes on knowledge and attitudes towards HIV/AIDS, its prevention methods and services, yet the majority of respondents still have inadequate orientation. While some of them don't have information about ECSC HIV/AIDS Management services and even those who have knowledge did not practically apply it in seeking services. To this end, there is a need for improved strategies, strong external and internal partnerships for more accessible services with active involvement of all students and staff.

The college should re-design messaging and prevention education strategies of targeting the community, strengthen its interventions of mainstreaming HIV/AIDS management into its mandated /curricular, education, training, research/ areas of activities for delivery of comprehensive services continuously accessible to its wider community.

Community around the vicinity of the college should be included as part of external mainstreaming through community outreach and services. HIV prevention strategies should be promoted by strengthening reproductive and sex education and mainstreaming HIV/AIDS education as standalone course for all programs. There is a need to innovate Information Education Communication strategy or materials preparation, awareness raising events and edutainment programs, and making these accessible to the ECSC community and surrounding community.

Many students and staff have misconceptions and perceive others themselves as among high risk group. There is a need to scale up college level organizational conversation, student and staff focused community dialogues, greater involvement HIV infected and affected people, increase sessions and coverage of events geared towards correct and adequate information and comprehensive knowledge about HIV&AIDS. The college should strengthen its participatory mainstreaming approach both internally and externally so as to align changes in knowledge with actual behavior and enhance the involvement of many actors than making it one section or institutional response.

## Competing interests

Author declare that he has no competing interests

## Author's contribution

The author himself designed the study, engaged in the data collection and follow-ups, analyzed the data, drafted the report and validated the study through half-day conference facilitated by the college.

## ACKNOWLEDGMENTS

The author would like to thank the Ethiopian Civil Service College for financial support with a honorarium incentive and technical support including facilitating the study finding to be presented in validation workshop . The author would also like to thank the study participants and colleagues at HIV/AIDS Management Unit who supported in data collection and editorial works.

## REFERENCES

- African Development Forum (ADF) (2000). *"AIDS and Development"*, AIDS: The Greatest Leadership Challenge, 3-7 December 2000, Addis Ababa, Ethiopia.
- Akukwe Chinua (2005). The Impact Of HIV/AIDS On The Civil Service In Africa, Presentation by National Academy of Public Administration Conference, Pentagon City, Virginia, United States.
- Bimbola Kemi Odu, Florence Foluso Akanle(2008). Knowledge of HIV/AIDS and Sexual Behaviour among the Youths in South West Nigeria, Department of Guidance and Counselling, University of Ado-ekiti, Ekiti State, Nigeria ,Humanity and Soc. Sci. J. 3(1):81-88
- Botchwey Kwesi(2000). HIV/AIDS and Economic Development in sub-Saharan Africa, ADF Forum 2000, Addis Ababa, Ethiopia.

- DHS(2006). *Ethiopia Demographic and Health Survey (DHS 2005)*. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Macro.
- Federal HIV/AIDS Prevention and Control Office- FHAPCO(2010). Federal Democratic Republic of Ethiopia. Report on Progress towards Implementation of the UN Declaration of Commitment on HIV/AIDS.
- FHAPCO (2007). National Consensus Meeting on Single HIV Prevalence Estimation, Adama, Ethiopia.
- Gashaw A(2007). Low prevalence of HIV infection, and knowledge, attitude and practice on HIV/AIDS among high school students in Gondar, Northwest Ethiopia. *Ethiop.J.Health Dev.* 21(2):179-182.
- ILO (2004). *HIV/AIDS and Work: Global estimate, impact and response*. Geneva.
- ILO (2005). *HIV/AIDS and Work: Global Estimates, Impact, and Response*, Switzerland.
- Lawrence W Svenson, Sara Carmel, Connie K Varnhagen(1997). A review of the knowledge, attitudes and behaviors of university students concerning HIV/AIDS, Health Promotion International Vol. 12, No. 1, Oxford University Press, Great Britain.
- Ministry of Education-MOE( 2009). Federal Democratic Republic of Ethiopia. Education Sector HIV/AIDS Policy, Addis Ababa, Ethiopia.
- Nigatu Regassa, Seman Kedir (2011). *Attitudes and practices on HIV preventions among students of higher education institutions in Ethiopia: The case of Addis Ababa University*.
- Philipos Petros (2006). *Exploration of Harmful Traditional Practices Fueling the Spread of HIV in Ethiopia*, Horn of Africa Journal of AIDS,HAJA II(1), People to People USA .
- Philipos P(2010). HIV/AIDS and Development: Impact of AIDS Orphans on Development, The Case of Addis Ababa, Unpublished MA Thesis, School of Graduate Studies, Addis Ababa University, Ethiopia.
- Philipos P(2002). Impact of AIDS Orphans on Development, Unpublished MA Thesis, School of Graduate Studies , Addis Ababa University, Ethiopia .
- Rikka Potsonen, Osmo Kontula(1999). Adolescents' knowledge and attitudes concerning hiv infection and HIV-infected persons, Health Education Research :Theory and Practice , Vol 4, No. 4, Finland.
- UNAIDS(2010). 2010 Report on Global AIDS Epidemic, Geneva.
- World Bank (2000). Multi-Country HIV/AIDS Program (MAP) for Africa- AFRHN AIDS Campaign Team for Africa, Africa regional Office, the World Bank, Washington, D.C
- XIAOMING L(2004). HIV/AIDS knowledge and the implications for health promotion programs among Chinese college students: geographic, gender and age differences, Health Promotion International, Vol. 19. No. 3, Oxford University Press, Great Britain
- Yifru Berhan, Dejene Hailu, Abraham Alano(2010). Predictors of Sexual Debut and Multiple Partners among University Students: Aspects of Risky Behavior towards HIV-Infection. Hawassa University.
- Yohannis Fitaw, Alemayehu Worku(2002) .High-risk sexual behavior and pattern of condom utilization of the Gondar Collage of Medical Sciences Students, North-west Ethiopia, *Ethiop. J. Health Dev.*,16(3):335-338
- Yusuf Ali Mehajeb(2007). HIV/AIDS Knowledge, Attitude and Practices among persons with Sensory Disabilities in Addis Ababa: The Case of ENAB and ENAD, unpublished MSW Thesis, School of Graduate Studies, Addis Ababa University.