

Case Study

Risk Perception, HIV/AIDS Related Knowledge, Attitude and Practice of the University Community: the case of Ethiopian Civil Service College

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ABSTRACT

Aim: The study sought to assess risk perception, HIV/AIDS related knowledge, attitude and behaviors of the ECSC community to more adequately contribute to the literature in the field.

Background: Though HIV/AIDS is one of the worst health crises in recorded history in the world, it has moved beyond being primarily a health issue, to a 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 need to seriously address HIV/AIDS in their mandate.

Materials and Methods: A cross-sectional survey was conducted between January-June 2011 using mixed methods where a structured questionnaire was administered to 250 respondents while focus group discussion was conducted and selected key informants were interviewed.

Results: Out of 250 respondents, 238(with 95% response rate) returned the questionnaire. The majority of respondents know about the risk, the means of transmission and prevention about HIV&AIDS. All respondents never perceive they are at risk for HIV. Unsafe sex and multiple concurrent sexual partnerships were found among all religious groups, married staff and students. However, compared to female respondents, males were found to admit to more unsafe sex practices. Qualitative data supports this finding.

Conclusions: Positive changes regarding awareness and attitudes towards HIV/AIDS were noted, yet comprehensive knowledge is still lacking. An improved strategy to promote comprehensive knowledge and behavioral change interventions is needed in ECSC. Implications from these finding suggest that other institutions may benefit from similar changes.

Keywords: Risk perception, HIV/AIDS, Knowledge, Behavior, University community, Ethiopia, Ethiopian Civil Service College (ECSC).

INTRODUCTION

The objective of this study is to examine risk perception, HIV/AIDS related knowledge and attitudes of the ECSC community in seeking and utilizing HIV/AIDS management services of prevention, care and support services. The exact timing of HIV emergence is unknown. Over three decades after HIV/AIDS was first reported by the Communicable Diseases Control (CDC) in 1981, more than 33 million people in world are estimated to be infected with HIV. Sub-Saharan Africa, the global epicenter of the AIDS pandemic, still is home to over two-thirds of HIV infected people, with high prevalence among adult ages 15-49 (UNAIDS, 2010 & World Bank, 1999). The pandemic is "unique in its devastating impact on the social, economic and demographic foundations of development", particularly in Africa (UNAIDS, 2010 & Philipos, 2010& 2002). More than 83% of all new infections in many African countries are among young and productive people in which females outnumber males (ILO, 2004; Lawrence et al., 1997& UNAIDS, 2010). Sub-Saharan Africa, with about 22.5 million people living with HIV/AIDS and 1.3 million new infections per year, is the most affected region in the world (UNAIDS, 2010; Akukwe, Chinua, 2005; ADF, 2000; ILO, 2004&2005; Botchwey,2000).

With regard to knowledge, attitudes and behaviors concerning HIV/AIDS infection and services, many studies in Africa and Asia (Rikka & Osmo, 1999; Bimbola & Florence, 2008; Xiaoming, et al., 2004) reported increased knowledge and positive attitude changes towards HIV/AIDS. However, despite the improved knowledge about HIV, most of the students of universities / colleges that participated in these studies were found to be engaging in risk behaviors including casual sex, multiple concurrent sexual intercourse, and sex in exchange for favors predispose them to risks of HIV and related reproductive health problems. Moreover, a significant number of participants in these studies have misconceptions about transmission and protection of HIV (Yohannis & Alemayehu, 2002;

Xiaoming et al., 2004, Bimbola & Florence,2008) . Lawrence, et al., 1997 on the other hand, found significant differences in risk perceptions, knowledge, attitude and sexual behaviors among universities in the Western countries. The authors highlighted the importance of such studies in promoting HIV/AIDS awareness and evaluation of key prevention strategies.

The first two AIDS cases were reported in Ethiopia in 1986. Federal HIV/AIDS Prevention and Control Office (2007&2010) indicated that adult prevalence was 0% in 1984; 6.6-7.7% in 2001/02, which was substantially reduced to 1.5% in 2011(EDHS, 2011). One of every 13 adult Ethiopians are reported to be infected with HIV, while in the urban areas 1 of every 6 adults are reported to be infected (Philipos, 2010). The situation among students in the universities/colleges is often linked to gaps in their risk perceptions, HIV/AIDS related knowledge and behaviors gained in high school. These behaviors are believed to be precipitated by exposure to pornography, drinking alcohol, chewing khat (a mild stimulant locally grown green leaf), smoking cigarette and shisha (a stimulant like marijuana). A study conducted in 2010 among 5824 sample students drawn from five public universities in Ethiopia has shown the existence of these as risk factors for acquiring HIV. For instance: illicit substance use was reported by about quarter, 25.8% (1504/5824) of respondents with almost similar proportions across the universities, more than a quarter of the students in the five universities, 1702 (29.71%), ever had sexual intercourse. Out of those who were sexually active in the last 12 months, 281 (31.0%) had sexual intercourse with more than one sexual partner and 207 (26.6%) had sex without using a condom (Regassa & Kedir, 2011).

The national study findings shown the overall awareness (than comprehensive knowledge) , attitude and perception of self risk and caring for HIV infected community members was found good towards causative factors and prevention methods of HIV (UNAIDS, 2010; FHAPCO-MOH, 2007& FHAPCO, 2010;DHS,2006 &EDHS, 2011). Although there are improvements in knowledge, multiple behaviors among the heterosexual community are still known to be the primary route of HIV transmission in Ethiopia. Despite concerted efforts by the government and its collaborators, higher learning institutions are places of knowledge and skill but are now perceived as places at risk for HIV infection. It is well known that education remains the most human intensive sector in Ethiopia which acts as a social vaccine to avert HIV/AIDS infection and promote reproductive health. 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 57, 2384 and 16,594, respectively (Ethiopian Ministry of Education/MOE, 2009).

Ethiopian Civil Service College (ECSC), one of the few higher learning institutions committed to recognizing the impact and enigma of the epidemic on public service performance has been attempting to respond through institutionalized mainstreaming since 2004. To this end, the college has been aggressively engaged in innovatively mainstreaming gender sensitive and responsive HIV/AIDS interventions into its curricular and co-curricular as well as community outreach services acclimatized to national and sectoral policies. Yet, no attempt has been made to explore the level of knowledge, attitude and behaviors of its student and staff community. Hence, lack of documentation on how far the college addressed these issues through its mainstreaming response interventions. This study, the first at its kind, in its attempt to identify the state of knowledge, attitude and behaviors or practices of actually utilizing HIV/AIDS management services among its community.

MATERIALS AND METHODS

Mixed methods of quantitative and qualitative study design was employed 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, and that the best may be mixed methods with triangulation of the information, sources of data and instruments. Hence, the 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.

Multi-stage sampling techniques were used to systematically identify respondents and informants from institutes/academic, management and administrative departments and institutes. A list of students from admission and registration office and a list of staff community from human resource department were the major sampling frames to identify and draw 250 sample respondents. However, 238 actually filled out and returned the completed questionnaires back to the researcher.

Purposive sampling techniques were employed to identify 8 key informants from staff and students for qualitative data yet the interview was held with only six informants (four student representatives and two staff members). The study was supported by a focus group discussion (FGD) with purposively selected 9 members. A good mix of participants with rich information on the issue under consideration were included from students and staff members drawn from senior staff , student clinic, anti-AIDS club leaders, proctors of male and female dormitories.

Descriptive statistics and SPSS version 15.0 were used to analyze and present quantitative data and findings. After data transcription, categorization and reduction, thematically organized content analysis was made for qualitative data and triangulated with quantitative findings.

RESULTS AND DISCUSSION

This is a cross-sectional descriptive study conducted between early January and end of June 2011. This study found that among 250 of the study participants, only 238 (with 95% response rate) responded to the questionnaire. They are categorized as undergraduate students 105 (44.1%), postgraduate students 54 (22.7%), administrative staff 54 (22.7%) and academic staff 25 (10.5%). One hundred sixty-five (69.3%) were males and 73 (30.7%) were females. With regard to respondents' knowledge about HIV/AIDS, 43 (79.6%) of the postgraduate students reported that HIV/AIDS were not one and the same whereas 13% responded that HIV/AIDS were one and the same. The large majority (88.0%) of academic staff said that HIV/AIDS were not one and the same, whereas, 12.0% of them said that HIV/AIDS were one and the same.

Table 1 Knowledge of ECSC Community about HIV/AIDS services

Variables Response	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 (22.0)	29 (54)	25 (46.3)	42 (77.8)	10 (18.5)	23 (92)	2 (8)
HIV/AIDS are one and the same	7 (13.0)	43 (79.0)	20 (19)	77 (73.3)	9 (16.7)	38 (70.4)	3 (12.0)	22 (88)
Heard about condoms in ECSC	100 (95.0)	4 (4.0)	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: Philipos Petros Survey on HIV/AIDS, March 2011.

As can be seen from Table 1, the majority of respondents (74.2%) have heard about HIV & AIDS in the ECSC community. The results are significant ($p=0.001$) according to Kruskal-Wallis (H). On the other hand, 22.5% of undergraduate respondents had never heard about HIV and AIDS. Among the staff respondents, 92.0% of respondents had heard about HIV/AIDS while 8% of them had never heard of HIV within the campus. These results indicate a significant correlation between the categories of the respondents and knowledge about HIV & AIDS in the ECSC. Results from the Pearson Chi-Square Test, indicated non-significant differences by yielding values of 0.647, 0.195, 0.242 for students, administrative and academic staff category, respectively. With regard to knowledge about a place to go for HIV testing, the majority of the respondents did not know where to go to get tested for HIV. None the less, they had heard about HIV testing.

Concerning knowledge about condoms, almost all respondents have heard about condoms. The mass media was found to be a major information source about condoms (68.1%). This finding is in agreement with the national study (DHS 2006&EDHS, 2011) which found that a large majority of adults in Ethiopia know about condoms and the major source of information was mass media. With regard to respondents' similarity or difference in knowledge gained through ECSC services, 52 percent of all respondents reported that training workshops conducted at the ECSC as a major source of information about condoms and other services. In this regard, the present study differs from the previous studies which did not clearly show institutional HIV/AIDS training as sources of knowledge for HIV prevention (Bimbola & Florence, 2008; Xiaoming et al., 2004; Regassa & Kedir, 2011). Thus, the approach used and data gathered in this study in regard to the impact of training workshops conducted in the institution (ECSC) as one of the main sources of knowledge for HIV prevention through the use of condoms as a significant preventative measure.

The study also found that most of the graduate and undergraduate students know a place or a person in the college that they can obtain condoms, 72.0% and 75.8%, respectively. The major source of accessibility of condoms for staff and students was reported as the ECSC's corridors, around dormitories and at the student clinic. However, compared to students, 50% of the administrative, and 80% of the academic staff are unaware of where to obtain a condom on the campus.

Focus group discussants and three key informants on the other hand agreed on the accessibility of condoms in the student clinics than corridors and student dormitories. One of the key informants has the following to say: "... *In fact condom promotion and distribution is the key for HIV prevention in the workplaces like our college campus. I have seen many public service institutions in Ethiopia make condoms easily accessible to the employees in the toilets and corridors, which is lacking at our college. We have learned in this college and heard from radio or television that condoms are not only for HIV prevention but also for other sexually transmitted diseases and unwanted pregnancy. Despite the college providing many training and information on HIV prevention and peer education, services that provide easily accessible condoms for employees is lacking here.*"

Contrary to the above reflection, another key informant forwarded the following "... *I don't agree on making condoms accessible in the toilets and corridors, as this might provoke staff, students and married employees to engage in unexpected sex or encourage them to practice adultery which deviates from the values of society.*"

The majority, (98.1%), of respondents declared unprotected sexual intercourse as the major route of HIV transmission. This study revealed similar findings to other studies conducted in the universities and colleges in Africa

and Asia (Bimbola& Florence,2008 ; Xiaoming et al., 2004; Regassa&Kedir, 2011; Lawrence et al, 1997; Rikka&Osomo,1999). While sharing contaminated sharp instruments, contact with infected blood and transmission from infected mother to child (85.4%, 77.5%, and 71.5%) as the second, third & fourth transmission routes of HIV transmission, respectively.

Table 2 Community knowledge about place or person where they can obtain Condoms

Variables Response	Undergraduate		Postgraduate		Admin staff		Academic staff	
	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: Philipos Petros Survey on HIV/AIDS, March 2011.

The results in Table 2 indicate that among the student respondents, 16(29.6%), 26(24.6%) and 31(57.4%) of postgraduates, undergraduates and admin staff, respectively did not know any place or person from which they could obtain condoms in the ECSC. Whereas, among the staff respondents, more academic staff (than administrative staff) did not know any place or person from which they could obtain condoms in the ECSC. That is, 80.0% of the Academic staff did not know any place or person from which they could obtain condoms in the ECSC.

The majority of student respondents' access to condoms is at the ECSC especially corridors, around dormitories, clinic 44.5% and 12.6% of male and female respondent's source of information is at the ECSC, respectively. 11.8% and 34.5% of students on the other hand reported that friends and shops/kiosks as sources of condoms, respectively.

FGD participants on the other hand shared their experiences and reflected that "... student clinic and dormitory corridors are the only places for making condoms available and accessible for students, particularly male condom. Female condoms are not available and accessible. The accessibility of condoms is mainly limited to dormitory and clinic areas of middle campus but Kotebe campus has limited accessibility of condoms for students. One of the key informants on the other hand says "... accessibility of condoms for staff is not given attention, this is big gap in the workplace for HIV prevention through condoms as an option , the concerned body should address this gap of prevention intervention through condom distribution and voluntary counseling and testing (VCT) giving equal attention to students and staff..."

However, one of the female staff members who participated in the FGD strongly argued against making condoms widely accessible in the toilets, dormitories and corridors. Her justification was that such practices may provoke staff and students to openly practice sexual intercourse in the workplace, which is against the workplace values and ethics of public service. The other participant contended against the above opinion saying "...Condom distribution is not aimed to promote promiscuity, but rather to protect the life of sexually active people. Thus condoms should be distributed after adequate peer educations and trainings..."

Two key informants who represented student clinic and anti-AIDS club reiterated that "...despite a number of training and community conversation sessions organized by the college, many of the staff and students are not actually seeking services like accessing condoms freely from clinic and appropriate outlets..."

One of the FGD members representing staff said "...well, I feel the college should make condoms available and accessible to all staff and students but condom outlets should be arranged in strategic locations of the college including condom boxes in each of the floors of the blocks, toilets, cafeteria and short term training corridors..." This is because the clinic services are only for students and staff cannot use any service from the clinic. There is no problem for accessing condoms for the needy students who can access condoms from the college clinic and corridors of dormitories.

A staff KI reflected that "...it is well known that condoms are available and accessible in many places including outside the campus, the same holds true for VCT and our staff and students can also use these options. But another participant added that "it is not enough, staff members who wish to use condoms should have continuous and consistent access for HIV prevention or reproductive health related needs..."

While table 3 below portrays the majority, 22(49.9%) male and 24 (49.0%) female staff's access to condoms are shops or kiosks rather than campus outlets. While some male and female staff (20.4%) members' source of condoms are ECSC outlets. This clearly indicates that access to condoms and perceived utilization is relatively low for staff than student community of the college.

Table 3 Sources of Condoms for staffs.

	Source of Condoms for staff	ECSC(corridors, around dormitories, clinic or offices)	Friends or colleagues	Shops/Kiosks around ECSC	Other
Staff (Male)	Count	8	3	22	11
	% of Total	16.3%	6.1%	44.9%	22.4%
Staff(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%

A key informant from student representatives and staff nurse reflected that "...The focus by the college and concerned unit should be continuous training and community conversations on HIV/AIDS /Reproductive health matters. Then, after gaining adequate information, student and staff can decide where to access, when, why to use condoms and other HIV services..." The informant added that "...HIV prevention and control activities of the college are going well. In fact there is a need to upgrade service delivery facility; avail trained counseling professionals on HIV/AIDS and VCT facility for both students and staffs..."

Table 4 ECSC community knowledge about VCT services (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: Philipos Petros Survey on HIV/AIDS, March 2011.

Of all those respondents who heard about HIV&AIDS in the ECSC, 97(43.5%) and 63(28.3%) were married and single, respectively while 5(2.2%) were 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. Specifically 89 (84.8%) and 42 (77.8%) of undergraduate and postgraduate students heard about HIV testing, respectively. On the other hand, 16(15.2%) and 12(22.2%) of postgraduate and undergraduate students never heard about HIV test. With regard to staff, 45(83.3%) and 5(20%) of admin and academic staff heard about HIV testing. Surprisingly, 20(80%) of academic staff declared that they have never heard of HIV test services.

Table 5 Respondents' knowledge about routes of HIV transmission

Items used to measure respondents' knowledge about routes of HIV transmission	All students (n=159)		All staff (n=79)	
	#	%	#	%
Unprotected sexual intercourse	154	96.8%	72	91.1%
Sharing contaminated sharp instruments such as razor blade& needles	133	83.6%	58	73.4%
Contact with infected blood	121	76.1%	55	69.6%
Mosquito bite	13	8.2%	11	13.9%
Shaking hands, learning/working together with someone who has HIV in his/her blood	9	5.7%	5	6.3%
Mother to child transmission(MTCT)	113	71.1%	48	60.8%
Other	11	7.0%	4	5.1%

Source: Philipos Petros Survey on HIV/AIDS, March 2011.

As can be seen from Table 5, the overwhelming majority of respondents reported that unprotected sex (for instance, 96.8% of students and 91.1% of staff), sharing sharp instruments and contact with infected or unscreened blood were found 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, et al., 1997; Rikka & Osmo, 1999). The table further shows that HIV can be transmitted through mother to child transmission, which was declared by 113(71.1%) of students and 48, 60.8% of staff members participated in the study. Surprisingly, though the large majority of ECSC community have general knowledge about HIV & AIDS, the study found that a significant number lack adequate knowledge about HIV transmission routes (8.2% and 5.7% of student participants reported that mosquito bite and shaking hands or learning/working together with someone who has HIV in his/her blood), as HIV transmission routes, respectively. These figures were reported as 13.9% and 6.3% for staff members, respectively.

Table 6 Respondents' Knowledge about HIV prevention methods

Items used to measure respondents' knowledge about HIV prevention methods	All students (n=159)		All staff (n=79)	
	#	%	#	%
Abstaining	117	73.6%	45	60.0%
Being faithful	102	64.2%	40	50.6%
Properly using condoms	115	72.3%	51	64.6%
VCT(Voluntary Counseling and Testing)	42	26.4%	15	19.0%
Other	8	5.0%	1	1.3%

Source: Philipos Petros Survey on HIV/AIDS, March 2011.

Table 6 indicates respondents' knowledge of abstaining (73.6% of students and 60% of staff), being faithful (64.2% of students and 50.6% of staff who participated in the study) and use of condoms (72.3% of students & 64.6% of staff) as the first, second and third major HIV prevention mechanisms and approaches. About 42(26.4%) and 15(19%) of students and staff have knowledge of VCT as the fourth most important HIV prevention method. Other studies have also produced similar findings indicating that abstaining, being faithful and use of condoms are the major methods of HIV prevention (Rikka &Osmo 1999; DHS,2002; Philipos, 2006; Regassa&Kedir,2011).

The large majority of student respondents' source knowledge and awareness about HIV/AIDS was reported as media sources (FM 97.1, Television and news papers). While the second large majority of respondents received information from ECSC's HIV/AIDS prevention and control service packages (mainstreaming interventions like training and ECSC community conversations). Key informants further supported that nowadays students are using their mobile phone (ICT) with FM radio channel as a source of entertainment as well 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.

Contrary to students' response, the large majority of staff respondents' source of awareness and knowledge about HIV/AIDS was reported as "the ECSC HIV/AIDS services", which is the second largest source for students. While the next largest majority of staff reported media as their source of information about HIV/AIDS. Other studies (DHS 2006; Lawrence, et al 1997; Rikka &Osmo 1999) have also come up with similar findings on the source of information about HIV/AIDS.

Respondents were also asked to report their views for the question: Would you like to know your HIV status? Accordingly, about 74.1% of the postgraduate students who responded to this particular question wanted to know their HIV status, whereas, 82% of the undergraduate student wanted to know their HIV status. Among the staff respondents, 86% of the administrative staff and 76% of the academic staff wanted to know their HIV status, while 8% of academic and 15% of administrative staff did not want to know their status.

A key informant from student clinic said that HIV testing service was integrated as one of the major healthcare services of the college, some years back due to fear and personal decisions, many students were not willing for being tested in this clinic. Rather, they prefer to be tested outside the clinic. Senior staff members who left the clinic told us that due to lack of interest/demand for this service, HIV test reagents and kits were expired at that time.

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 attitudes towards being tested. Almost all respondents don't perceive that college students are free from risks and vulnerability to HIV.

Table 7 Do you feel (perceive) that you are at risk of HIV (being infected)?

Respondent	Yes	No
Students	Male 65 (29.3%)	Male 50 (22.5%)
	Female 19 (8.6%)	Female 15 (6.8%)
Staff	Male 29 (13.1%)	Male 19 (8.6%)
	Female 10 (4.5%)	Female 99 (44.6%)
Total (222)	123 (55.4%)	99 (44.6%)

Table 7 indicates 123(55.4%) of sample respondents perceive that they are at risk of being infected by HIV, of which, the majority are men (42.4%).

On the other hand, 99(44.6%) of the respondents (students or staff; married or single) have never felt that they are at risk of HIV. Statistical analyses indicate that there is no significant differences between marital status, sex, age and category of respondents with the feeling that at risk of HIV ($p=0.846$, Kruskal Wallis).

The study found that 78(53.4%) of students and 39(58.2%) of staff have caring attitudes for ECSC student/staff who are HIV positive. However, a significant number of sample respondents, i.e., 40(26.7%) students and 18(25.4%) staff, favor keeping HIV status as secrete rather than disclosing status.

The study revealed that the large majority of respondents (staff and students), i.e., 147, (67.7%), particularly men, do not want to know if their peers or classmates got infected. Hence, the majority of sample respondents declared that they favor secrecy of HIV status if their classmates and colleagues get infected with HIV.

Respondent's opinion towards their behavior/practice of casual sex, particularly towards the question "Have you ever had sex with casual partners?" Accordingly, among those students who responded to this specific question of risky or causal sexual practice, 56(40.3%) and 26(18.7%) male and female students did not practice casual sex. However, 40(28.8%) of male and 7(5.0%) of female student respondents practiced sex with causal partners. Though the number of staff members practiced in casual sex were low in number, among those who practiced casual sex, the proportion of male staff members is relatively higher than that of female staff respondents of the study.

Pertaining to staff practice of casual (risky) sex, 28(40.0%) and 18 (25.7%) of male and female staff members didn't practice casual sex, respectively. Whereas 15 (21.4%) and 6(8.6%) male and female staff declared that they had actually practiced casual sex with partners. Thus this study found that a significant number of the ECSC community members participated in this study didn't practice casual sex, but some students and staff had causal or risky sex, which is considered as aspect of risk behavior.

Respondents' behavior or practice of having multiple sexual partners was assessed, and twelve, 53(36.3%) of male students and 12(8.2%) female students never had sexual partners in the last three months prior to this study. A large majority of student and staff respondents had between 1 and 3 sexual partners in the last three months, while few attempted to have such risky sexual behaviors between three to six times, which is dominated by male students. With regard to staff respondents, 22(29.3%) and 11(14.7%) of male and females never had multiple sexual partners within the last three months. Eighteen (24.0%), 13(17.3%) male and female staff had one partner, and 8 staff members (6 male and 2 females) had 2-3 sexual partners.

With regard to the assessment of respondents' opinion towards their sexual practice related question "How many times have you had casual sex in the last three months?" Eighty (56%) and 22(15.6%) male and female students never had casual sex in the last three months prior to this study. This figure was found 32(45.1%) and 17(24%) for male and female staff respondents, respectively. However, significant number of both staff and students had casual sex 2-3 times to more than 6 times in the past 3 months which clearly shows risky sexual practices which could precipitate risks and vulnerability of HIV/AIDS/Reproductive health problems among ECSU students and staff.

The study also revealed that the majority of respondents, i.e., 33(56.9%) of staff and 75(67%) student respondents never used condoms correctly and consistently in their casual sex. While some respondents, i.e., 16(14.3%) students and 14(24.1%) staff respondents declared that they did use condoms correctly and consistently in all casual sex encounters.

Respondents were asked to forward their experiences for the question "Have you ever been tested for HIV?" It was found that 62.7% and 60% of staff and student respondents, respectively been tested for HIV, while 36% and 37.2% of staff and student respondents declared that they did not attempt to be tested for HIV. Yet, some respondents did not volunteer to respond to the question.

With regard to respondents' practice of condom use, for the question "Have you ever used condoms?" Among those who had used condoms, 59(38.8%) and 11(7.2%) were male and female students, respectively. About 47(30.9%) and 20(13.2%) male and female students, respectively didn't use condoms. From this, we can see that female student's condom use practice is lower than that of their male counter parts.

Pertaining to staff's condom use practice, 26(36.1%) and 10(13.9%) of male and female staff respondents ever used condoms, shows female staff's condom use practice is lower than that of males. Eighteen(25.6%) and 10(13.9%) male and female staff respondents never used condoms, the proportion of female staff who have never used condoms is higher than male staff. This shows same finding compared to similar findings that depicted female's condom use practice is lower than that of males in Ethiopia, including community members of universities/colleges (Regass&Kedir, 2011; FHAPCO, 2007; FHAPCO, 2010;EDHS,2011; Xiaoming et al., 2004; Bimbola & Florence, 2008). Thus, the overwhelming majority of sample respondents used condoms yet almost equal number of respondents never used it as a means of preventing HIV infection.

The majority of student respondents (84(59.6) who responded to this specific question declared that they never had sex with causal partners. However, 48(34.0%) students from married and single status declared that they had sex with causal partners. With regard to staff community, 43(64.2%) never ever had sex with causal partners, but 21(31.3%) of them from both married and single status reported that they had experienced sex with causal partners. Many student respondents (65, 44.5%) never had sexual partners in the past 3 months; while 61 or 41.8% had only one partner demonstrating sexual behavior of having none or 1 sexual partner in the last 3 months and lower risk of infection.

However, about 30 respondents had at least 2 and more than 5 sexual partners during the last 3 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 supports this finding by stating "... a 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 degrees, but regardless of respondent's marital status and related demographic and personal characteristics and statuses. Findings from this study were similar to those studies documented by many authors and researchers in the field (Xiaoming et al 2004; Nigatu & Seman,2011;Yusuf, 2007; Yohannis Fitaw&Alemayehu Worku, 2002; Lawrence, et al., 1997; Rikka & Osmo,1999; DHS, 2006) .

This study found that the majority of respondents committed no casual sex 3 months before this study was conducted. That is, 102(71.3%) and 49(69%) staff respondents had no casual sexual practices in the last 3 months prior to this study. Yet, quite a significant number of the respondents (both male and female, staff and students) had more than 3 casual sexual partnerships. About 13 respondents practiced casual sex more than 6 times within 3 months, which is a clear indication of the prevalence of risky sexual behavior. Many studies have similar findings (Yusuf, 2007; Philipos, 2006; Yohannis & Alemayehu, 2002; Lawrence, et al., 1997).

Many student respondents did not attempt using condoms during their casual sexual encounters (75 or 67.0% and 33 or 33.9% for students and staff respondents, respectively). This is a clear indication of high incidence of risky sexual behaviors among sample student community. In fact, this was done regardless of their year of stay in the college, religiosity and age, being postgraduate or undergraduate and, being married or single.

With regard to respondents' view of their experience if they have ever been tested for HIV, many student and staff respondents have taken VCT (87,60.0% and 47,62.7% of student and staff respondents, respectively), 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 preferred private facilities due to fear of stigma if the result is positive.

Table 8 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 %)

Table 8 shows that large number of sample respondents justified that they did HIV test mainly to protect themselves, while a significant number reported that they had a history of reproductive health problems. Key informants interview (KII) result supported this finding that students often take voluntary self initiated test to protect them or due to symptoms of sexually transmitted diseases though the incidence and prevalence of STIs is not significantly high in the student clinic. But one of the key informants pointed out those students, if they have STI history and never tested for HIV, don't show up and inquiry for STI treatment or VCT relate services. In fact, very few students were willing to take advantage of such services.

CONCLUSION

The study declared that the majority of students and staff heard about and have awareness of HIV/AIDS in the ECSC through its commendable mainstreaming interventions, including HIV prevention, education and training programs, community dialogues, care and psychosocial support. While a large number of respondents heard and know about HIV testing, and condom use 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 VCT.

This study concludes that there are positive changes among the students and staff on general knowledge and attitudes towards HIV/AIDS, its prevention methods and services. However, the effects of these positive changes in knowledge and attitude are not yet adequately linked with the expected behavioral practices of seeking and utilizing HIV/AIDS services organized by the ECSC. Results from this study indicate that the majority of respondents still have inadequate orientation. 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. Many students and staff have misconceptions and perceive others rather than 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 of 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.

Although this study is an important step toward increasing understanding and knowledge, attitude and behavior of university/college students and staff towards HIV/AIDS, there are limitations. First, despite some data are supported by qualitative approaches, the study depends on the perceptions of sample representative students drawn only from second year and above, hence the perception of first year students was not included. Second, the sample size may not be large enough. Finally, like any survey study, there may be response bias. Thus, in order to generalize and validate the findings of this study, future research should be directed at conducting a similar study involving large sample size for generalization purpose.

Competing interests

The Author declares that he has no competing interests

Author's contribution

The author 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 himself.

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