

Voluntary Counselling and Testing Seeking Behaviours Among Public University Students, Coast Region of Kenya

Dr.Alice A. Anika^[1]

Abstract:

Voluntary Counselling and testing seeking behaviours are HIV infection preventive practices. This study determined the VCT seeking behaviour patterns of Public University students in Coast region from 2012-2014. A descriptive cross sectional study among 368 sampled Public University students using multistage sampling technique was used. The participants completed demographic questionnaire, VCT seeking behaviour Perception Scale (VCT-SBPS), VCT clinical records (VCT-CR) and VCT Counsellors interview schedule. HTC uptake among the students rose to 70% in 2014 from 25% in 2012, HIV prevalence trend moved from 15% in 2012 to about 50% in 2013 and down to 5% in 2014. About 55% of those in the age bracket between 15-26 years visited the VCT clinics in 2013. This showed a positive attitude towards the HIV Prevention programme among this age bracket who happens to form the majority of students in the Universities. The male students HTC accessibility was more in 2013 by 54.95% compared to female (12.45%). However in 2014, the trend went down to 7.05% among the females. Student's perception to VCT clinics visitation was generally positive. The results implied that Voluntary Counseling and Testing (VCT) clinics uptake patterns highly depended on the extent continuous counseling, education, support and funding was provided to support the HIV prevention programmes in the Universities. The study recommended need for more professional counselors at the Universities to assist students and further research on interventions on safe sexual practices within this group.

Keywords: Voluntary Counselling and testing, seeking behaviour patterns, students, Universities.

I. INTRODUCTION

Across the world today, there seems to be a changing trend of youth sexuality engagements. The youth are becoming freer with one another in sexual interactions amongst themselves from the traditional African cultural context. While students today embrace cohabiting, group sex and the upcoming project X fame in Kenya (The Kenya Daily Nation; March, 10th 2016), the experimentation with sex often occurs between the time of finishing high school (18 yrs) and getting married (18-25 yrs and above). At such times majority of this age group are still in the institutions of higher learning and this forms part of students in the Universities. The Kenya government statistics, pointed out that three quarters of these young adults tend to have sex even before marriage, another quarter are too repressed to admit that they do have sex (Waga, 2016) and the percentage shoots up to 70% for those between the ages of 20-24 (KDHS, 2014). This study helps to reveal the extent VCT uptake among this group may enhance responsible sex behaviours among themselves.

The Kenya Government recognized the negative impact of HIV pandemic on university students. Therefore structures have been put in place to establish Sub-Aids Control Units (ACU) in the universities (Higher Education Newsletter, 2004). The role of ACU is to avail VCT services to help reduce HIV infection spread. This status cannot be achieved with low VCT seeking behavior among students in the Universities. This formed the basis for investigating the VCT seeking behavior patterns among university students.

1.1 Objectives of the study:

- 1) To document students behavioral patterns in VCT clinic uptake in relation to;

- i) HTC uptake across gender and age between 2012-2014.
- ii) HIV prevalence rate among the public university students between 2012 -2014
- iii) VCT clinics monthly visitation pattern and trend between 2012-2014
- iv) Services offered to the students at the VCT clinics in same period.
- 2) To establish students levels of VCT seeking behaviors in their Universities
- 3) To establish students perception on University's VCT clinics accessibility
- 4) To correlate the VCT seeking behaviors domains from within itself.
- 5) To find out Universities VCT counselors perception on VCT clinic usability by the students.

II. VOLUNTARY COUNSELING AND TESTING SEEKING BEHAVIORS

Studies have shown that VCT can lead to significant reductions in HIV transmission rate (CDC, 2012 reports). This study mainly focused on the behavioural intervention strategy outcome within a period of time by using counselling to decrease sexual risk behaviours. Currently there is a remarkable improvement in VCT access at least to 60% country wide in Kenya (KAIS, 2012). However, about 80% of PLWHA in low and middle income levels do not know that they are even infected (UNAIDS, 2014). This population automatically covers the youth who are in the Universities.

^[1]Educational psychology and Special Needs Department, Pwani University- P.O.Box 195 Kilifi, Kenya

The role of the VCT counsellors in HIV testing is to encourage clients to explore effective decision making which reduces indulgence in risky sexual behaviours ((Mkwanazi, Rochat, & Bland, 2015). This approach forms a core basis is assisting the youth transitional stage to adulthood.

III. METHODOLOGY

3.1 Research design

This study used descriptive cross sectional research design to establish Voluntary Counseling and testing seeking behavior patterns amongst the University students. This design is suitable to assess thoughts, opinions, and feelings and analyze behavior (Creswell 2003). In this study, the design was used in order to carry out interviews and further collect data using questionnaires which would then be used to assess the students VCT seeking behavior patterns.

3.2 Study Population, sampling and sample size

All the participants were undergraduate University students. Multistage stratified sampling technique was used to recruit students from each school in the universities and to ensure proper representation. Stage one; using a sample size of 368 calculated using Krejcie et al, (2002) table for determining population sample size was drawn. Stage two; all the schools in the Universities were stratified according to each University's structures based on gender. Stage three, total number of students participants were sampled based on the calculated sample size. Stage four; the number of participants who responded to the questionnaire was obtained using proportionate sampling method.

3.3 Validity of Instruments

This study used triangulation method in data sourcing instruments in order to validate, strengthen and increase credibility of data collected, (Golafshani, 2003). The first strategy used was to conduct a pilot study carried out at Kenyatta University –Mombasa campus, The second was academic experts as peer reviewers and the third strategy was consulting other professionals in VCT counselling certified by Kenya National AIDS and STI Control and Prevention Programme (KNASCOP) officers and also universities practising counsellors to evaluate the VCT Seeking behaviour scales. The results of the pilot study and professional advises were used to improve the instruments.

3.4 Reliability of Instruments

This study used Cronbach's alpha co-efficient to provide the internal consistency of scores from a single administration of all the instruments. This technique was suitable in determining correlations of items among themselves. The instruments reliability co-efficiency yielded 0.83 for VCT seeking behavior scale and was therefore considered reliable. Kothari, (2004) defines reliability as a measure of degree to which a research instrument yields consistent result of data after repeated trials.

3.5 Study instruments

The study used the following instruments i) VCT Seeking behaviour scale (VCT SBS), VCT clinical records and Universities VCT counsellors interview schedule.

Demographic survey was also used to collect background information about participants.

3.5.1 The Demographic Survey

This scale was constructed to generate quantitative data on participant's age, gender, and number of sex partners, religion, student's year of study and an open question seeking student's opinion on intervention strategies on youth friendly VCT clinics.

3.5.2 VCT Seeking Behavior Scale (VCT-SBS)

The instrument was used to find out student's perception on Universities VCT clinics services. The items were 10, scored on a five point Likert scales ranging from strongly agree to strongly disagree. For instance, 'I seek VCT services because counselors at the clinic are very friendly'; Choices;- Strongly Agree 5, Agree 4, Neutral 3, Disagree 2, strongly disagree. 1. The range of potential scores was from 10-50. High VCT seeking behaviour was scored as $5 \times 10 = 50$, average level was $3 \times 10 = 30$ and low level was $1 \times 10 = 10$. Level of determining High level score, medium level and lower level of VCT seeking behaviour was done upon this basis. Each variable was scored within the specific range of Likert scale from 1-5. The scores were interpreted as follows;

Table 1.0 VCT Seeking Behaviour Scale interpretation

Scores	%	Interpretation
0-10	50%	Low VCT seeking
11-30	60%	Moderate VCT seeking
31-50	100%	High VCT seeking

3.5.3 VCT Counselor's interview schedule

This instrument was created by the researcher and validated by the VCT counsellors certified by Kenya National AIDS and STIs Coordination Officers and Prevention (KNASCOP) to investigate the counsellor's perception on University students VCT uptake characteristics and patterns.

3.5.4 VCT Clinics records

This instrument was created by the researcher to investigate the university students VCT seeking behaviour patterns such as HIV prevalence rate from 2012-2014, HTC uptake by gender and age and services provided within the same identified period of study.

3.6 Data analysis

Qualitative and quantitative techniques of data analysis were used to analyse the data. Specifically demographic information were analysed using crossbar tables, VCT clinic records and Universities counsellors interview schedule reports were analysed using percentages, line graphs and descriptive narratives, students perception using VCT SBS; was analysed using regression analysis techniques.

IV STUDY FINDINGS AND DISCUSSIONS

4.1 Demographic Characteristics of Participants.

Participants characteristics was analyzed and presented in a cross tabulation form as presented in table 4.0 below.

Table 1.2: Age and Year of Study Category

Age		Year of study						Total
			First	Second	Third	Fourth	5	
18-26	Count	46	140	66	40	4		296
	% of Total	12.6%	38.3%	18.0%	10.9%	1.1%		80.9%
27-40	Count	4	20	15	24	0		63
	% of Total	1.1%	5.5%	4.1%	6.6%	.0%		17.2%
above 40	Count	0	0	2	5	0		7
	% of Total	.0%	.0%	.5%	1.4%	.0%		1.9%
Total	Count	50	160	83	69	4		366
	% of Total	13.7%	43.7%	22.7%	18.9%	1.1%		100.0%

Table 4.1 revealed that students between the age bracket of 18-26 participation was high (80.9%) while those in the age bracket of 27-40 years showed a low participation (17.2%) with those above 40 years (1.9%). Age bracket of between 18-26 years happened to be the majority participants and they were also second year's students 43.7%. This result gave a true reflection of the age category of students in the universities.

Table 1.3: Age and Religion Category

Age		Religion			Total
		Muslim	Christian	Others	
18-26	Count	37	253	3	293
	% of Total	10.2%	69.7%	.8%	80.7%
27-40	Count	16	45	2	63
	% of Total	4.4%	12.4%	.6%	17.4%
Above 40	Count	0	5	2	7
	% of Total	.0%	1.4%	.6%	1.9%
Total	Count	53	303	7	363
	% of Total	14.6%	83.5%	1.9%	100.0%

Table 4.2 revealed participants' response by age and religion. The results (14.6% Muslims) could be attributed to the time of data collection. Muslims visit the Mosques around lunch break before time for afternoon classes and the number of Muslims students in class at that particular time was affected. This was a limitation in this study. Even though, majority of students fell under the younger age category of 18-26 years 69.7% who were also Christians. This result does not imply that the Muslim students are not involved in the HIV prevention programme activities in the universities.

Table 1.4: Age and Number of Sex Partners Category

Age category		Number of Partners				Total
		One	Two	Three	Unknown	
18-26	Count	138	138	15	5	296
	% of Total	37.7%	37.7%	4.1%	1.4%	80.9%
27-40	Count	21	28	8	6	63
	% of Total	5.7%	7.7%	2.2%	1.6%	17.2%
Above 40	Count	5	1	1	0	7
	% of Total	1.4%	.3%	.3%	.0%	1.9%
Total	Count	164	167	24	11	366
	% of Total	44.8%	45.6%	6.6%	3.0%	100.0%

Table 4.3 revealed that those in the age bracket of between 18-26 years had had more than one sexual partners (80.9%). This implies that the young adults are at the peak of their sexual activities (Toska et al, 2015). Same sexual attraction and practice often occur among young people at this age and this has sexual and reproductive health implications (Leddy et al, 2016). More studies still need to be undertaken to explore HIV prevention practices.

Table 1.5: Gender and Number of Sex Partners

Gender		Number of partners				Total
		One	Two	Three	Unknown	
Male	Count	100	80	9	6	209
	% of Total	24.0%	15.0%	1.8%	1.6%	42.4%
Female	Count	61	90	17	5	159
	% of Total	19.8%	26.2%	10.2%	1.4%	57.6%
Total	Count	161	170	26	11	368
	% of Total	43.8%	46.2%	7.1%	3.0%	100.0%

The results on gender and number of sex partners in this study (Table 4.4) indicated that the female students engage in multiple sex relationships (57.6%) than the male students (42.4%). This result implies the need to step up VCT counselling services to reduce risk for HIV infection among the students. Coupled with issues of project x fame in Kenya as a recent phenomenon, there is need for parents to talk to their children and discuss safe sex modalities. The reality is that, risky sexual indulgence results in short term life span for the young adults. All mentors must educate the young adults on responsible sex behaviours, life skills, courtship, marriage and eventual settlements as core values in every individual member of the society.

4.1 VCT Seeking Behavior Patterns of University Students.

4.1.1 To determine the extent students access the University's VCT clinics for HTC uptake across gender and age between the periods, 2012-2014

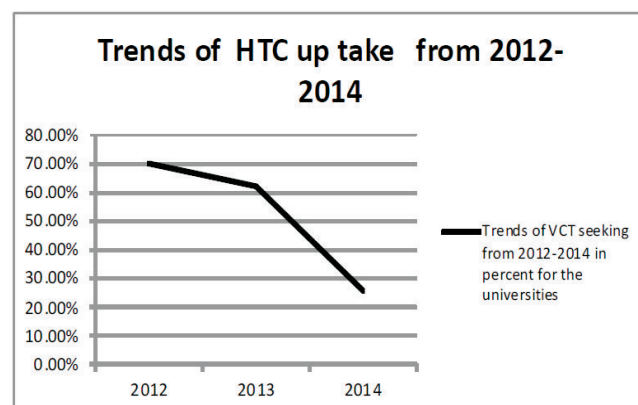
**Figure 1.0 Trends HTC uptake from 2012-2014**

Figure 1.0 Trends of VCT seeking from 2012-2014 notably went down. From the above data, it is clear that there was a remarkable awareness in 2012 by 70% but by 2014, the trend of HIV testing and counselling went down to 25%.

The results from Fig 1.2 shows that there was a decrease in HIV counselling and testing among students who are above 26 years from about 39% in 2012 to 0.9% in 2014. On the other hand, there was an upward trend amongst students whose age brackets was between 18-26 years to 59% in 2013 and then a downward trend to 19% in 2014. The upward trend in VCT seeking in 2013 seemed to have been embraced more by the younger age group between ages 18-25 who are the majority of university students. This implied that this age bracket were more aware of the benefits of accessing VCT services, they were more motivated, they had a positive attitude towards the VCT clinics accessibility and therefore they displayed the VCT seeking behaviours more positively than the older age.

This result also confirmed the demographic data results which revealed that those who were in the age brackets of between 18-25 were having more than one sexual partner 37%. These results implied that, the trend could have prompted the students to seek VCT services to get counselled in reproductive health, condom use and demonstration, HIV testing and counselling, HIV infection prevention, treatment and care methods so that they could embrace safe sex methods and avoid HIV infections.

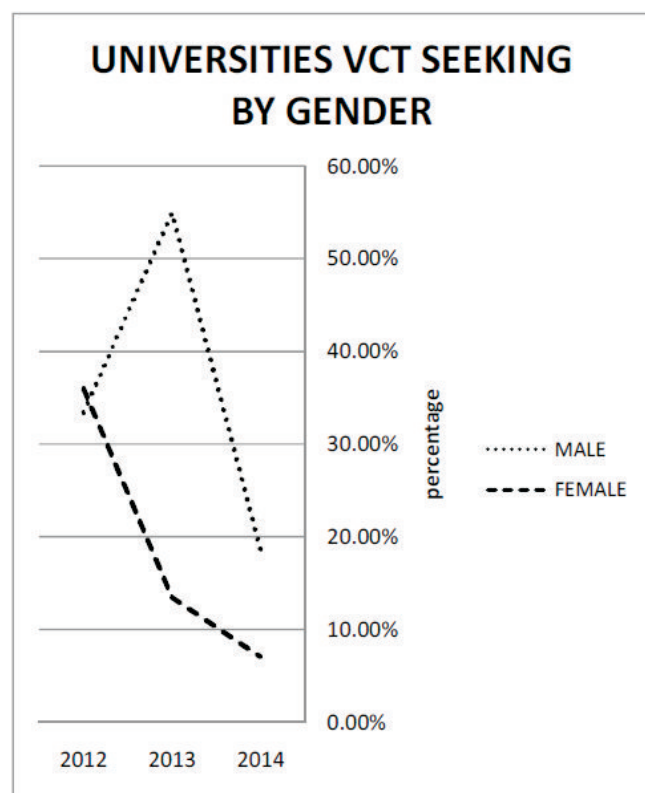


Figure 1.3 VCT Seeking Behaviours by Gender

Figure 1.3 shows that the HIV counselling and testing uptake by the females notably decreased up to 7.05% in 2014 from 33.4% in 2012 and 18.55% in 2014 among males. Although the result showed that in 2013, there was increase in voluntary counseling and testing among male (54.95%), the male VCT uptake was still slightly higher even from 2012 at 36% than the females. It's surprising to note that the male students were more keen to access the VCT clinic than the females yet studies (Mbogua 2004, Mumah 2011 and Oguta et

al 2011) shows that, VCT clinics visitation has been culturally perceived as the female domain because women frequent checkups at the clinics, have a tendency of high self-disclosure unlike men who self-concealment. The implications of this results explains the Kenya AIDS Indicator baseline survey results (KAIS, 2012) on why HIV infection rate was low among the males at 4.4 % compared to females 6.9%. This result implies that women are still in remission of ignorance, fear, self-concealment to embrace VCT seeking behaviours amongst the students. These factors enhance HIV prevalence more among females than males.

4.1.3 HIV prevalence rate among the public university students between 2012-2014

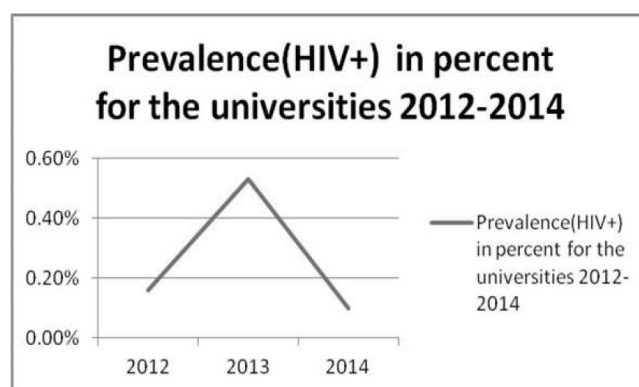


figure 1.4 Universities HIV+ Prevalence Rate

The results from Fig 1.4 on Universities HIV prevalence rate was about 18% in 2012 then dropped to 10% in 2014. However, there was a significant increase in prevalence rate in 2013 (0.50%). This change could be attributed to vigorous behaviour change and HIV infection prevention activities which were carried out in the Universities within the periods of 2012 -2014 such as massive campaign awareness on HIV counselling and testing, condom distribution and demonstrations, ABC approach; Abstinence, Be faithful to your sexual partner and Condom use and trainings and workshops.

4.1.4 Establish monthly patterns of VCT clinics visitation between 2012-2014

Students VCT seeking behaviour characteristics was analyzed using the VCT records. Descriptive data analysis was used. The findings were as follows.

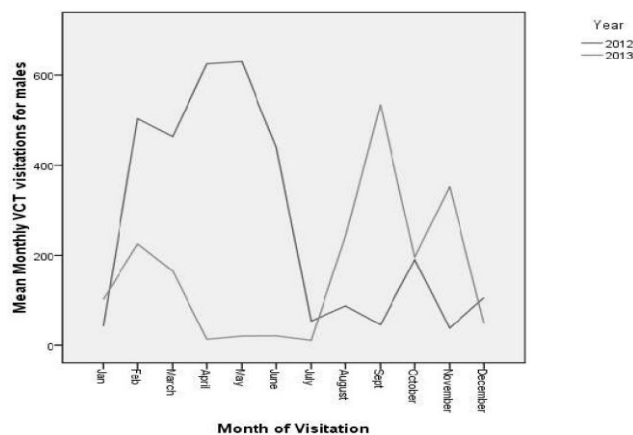


Figure 1.5 VCT Visitation Monthly Pattern between 2012/2013 (Male)

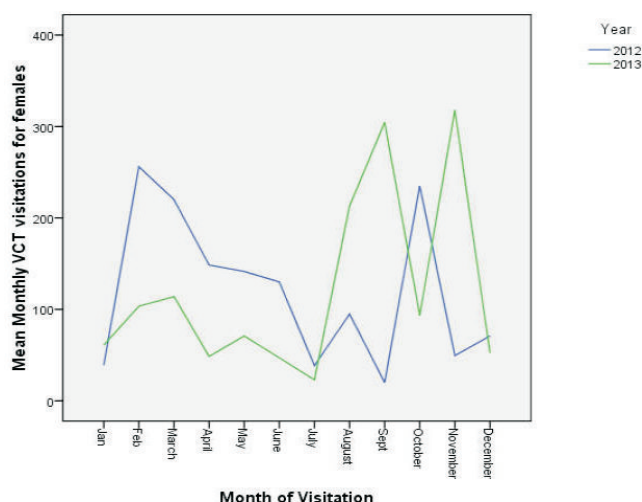


Figure 1.6 VCT Visitation Monthly Pattern between 2012/2013 (Female)

Figure 4.4 shows that monthly VCT visitation for male's students in 2012 were high between January and July but low between July and Dec. In 2013, VCT visitation for male students was low between January and July, and high between July and Dec. For the female students, Figure 4.5 high VCT visitation was observed between January and March 2012 and low between April-Sept 2012. In 2013 there was low VCT visitation between January and July and High visitation between August and December.

This VCT access pattern and trend coupled with the VCT counsellors reports, can deduce that high VCT seeking behaviour takes place during activities such as; an outreach, health drive, door to door campaign awareness in HTC, orientation times for first years, open door access for VCT clinics. Reasons for high levels of VCT seeking behaviours during those particular high seasons according to the universities counsellor's reports include; fear of contracting HIV virus after indulgence in risky sexual behaviours, fear of pregnancy, symptoms of Sexually Transmitted Infections (STIs), condom use (very highly accessed by male students) condom demonstrations, Voluntary counselling, HIV testing, disclosure of difficult sexual relationships, medication access (ARVS) general counselling on acceptance and coping with academic demands. These reasons explain the course for high turnover during the pick seasons of September and January. The adult learners also have high access in the months of April, August and December.

The VCT records revealed that some of the services the students access from the university VCT Units were; Voluntary Counselling and Testing, information and educative materials, condoms for both male and female and its demonstrations, Education on reproductive health and general wellbeing, Prevention of Mother to Child Transmission (PMTCT) education

4.1.5 Services offered at the Universities VCT Clinics between 2012-2014

The following were found to be common services offered to students at the Universities VCT clinics; Ongoing Voluntary counselling and testing, condoms distributions and demonstrations, education on Prevention of Mother to Child Prevention (PMTCT), blood safety, Voluntary Medical Male Circumcision (VMMC), Post Exposure Prophylaxis (PEP), making referrals, Antiretroviral (ARV) treatments access and referrals, Adherence to ARVs education and psychosocial support groups, HIV and AIDS prevention, care and treatment information, family planning methods, alcohol and drug abuse prevention and reproductive health education. However it was noted that student's accessibility to E-pills utilization was equally high within the short period the E-pills were availed to the VCT clinics. However this study could not assess the extent the E-pills were used by the students since proper quantification of distribution could not be found from the records.

4.2 Establish student's perception on University's VCT clinics accessibility.

The following were student's response for not accessing the VCT clinics in the universities. Majority (39.8%) of students pointed out stigma and discrimination as the most reason. Others factors included fear of testing HIV positive (30%), Belief of better not knowing state (9.2%), ignorance (7%), I don't care attitude (22%) and other factors (3%).

4.2.1 Strategies to improve University's VCT clinics more accessible and youth friendly

From the open question, some of the major thematic areas suggested included; Exposure to Universities VCT clinics with current electronics youth friendly equipments which youth can comfortably access (50%), an equipped fully resource centre (30%) and friendly professional VCT counsellors (15%) and other factors at (5%).

4.3 Levels of VCT Seeking Behaviors

Table. 1.6: Levels of VCT Seeking Behaviours across Age groups and Gender

	Number of Male			Number of Female		
	Age ≤26	Age ≥26	Total	Age ≤26	Age ≥26	Total
Low level	4.1%	4.6%	4.3%	4.8%	6.2%	5.4%
10-22						
Moderate level	13.3%	3.9%	13.4%	0.8%	0%	0.6%
23-46						
High level	82.6%	91.5%	82.3%	94.4%	93.8%	94.0%
37-50						
Total	100%	100%	100%	100%	100%	100%

Information from Table 4.5 indicated that both genders had high levels of VCT seeking behaviors. The male were at 82.6% for those below age 26 years and 91.5% for those above 27 years while the female under age 26 years were at 94.4% and those above 27 years were at 93.8%. This implies that the level of VCT awareness was high among the participants and their level of VCT seeking was also high. They seem to have a positive attitude also towards VCT uptake. What remains unknown is to what extent their visitation to the VCT unit translates to effective positive living and well being.

Another observable outcome from the above table was that, the level of VCT seeking behavior was higher among the female (94.4% and 93.8%) than the men. This behavior could be attributed to fear syndrome in men visiting VCT clinics (Tamayo et al, 1999). Empirical findings explain that men fear stigma and discrimination attributed to cultural practices associated with VCT services. VCT services require self-disclosure with the counsellor which is culturally perceived as a weakness in the male domain of perception.

The implication in this outcome could be associated with the demographic characteristics outcome which also revealed women as having more multiple sex partners than the male. This again means that there is an increased high risk of sexual engagements that propels the female to high VCT seeking behavior and the circle continues. The higher the risky sexual engagements, the higher the need for VCT clinic accessibility and the more the HIV tests uptakes.

4.4 Prediction of VCT seeking behaviors within its domains

Table 1.7: Correlations of VCT seeking Behavior domains

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.494	.778		5.779	.000
Attitude formation	1.690	.119	.395	14.231	.000
Motivation	1.978	.118	.464	16.754	.000
Decision making	.235	.110	.114	2.142	.033
Information seeking	.077	.111	.036	.691	.490
Self disclosure	.322	.038	.182	8.417	.000

Regression analysis was conducted to predict VCT seeking behaviour from its domains; Attitude formation, Motivation, Decision making, information seeking and self disclosure significantly contributed to VCT seeking behaviour at 0.05 level of significance; Attitude formation (P-value 0.000), Motivation (P-value 0.000), Decision making (P-value 0.033) and Self disclosure (P-value 0.000) while Information seeking was insignificant in predicting the VCT seeking behaviour (p-value 0.490) however, motivation (coefficient 1.978 P-value 0.000) and attitude formation (coefficient 1.690, p-value 0.00) emerged the most contributor to VCT Seeking behaviours.

4.5 Universities VCT counselors perception on VCT clinic accessibility by students The Universities VCT Counsellors interview schedule outcome, confirmed student's response as stated in 4.1.5. Some of the challenges counsellors faced in working with the university students at the VCT clinics was mainly self-concealment. 'Students are very secretive; especially those who fall in the age bracket of 18-26 as compared to those above 26year. Sometimes they come for Voluntary Counselling but too late. Some of the reasons for such behaviours are; fear, ignorance, stigma and discrimination. As a result ARVs adherence and slow psychosocial support group formation poses a great challenge among the students. Strengthening of Voluntary Counselling and Testing Seeking behaviours uptake requires continuous trainings and self-disclosure as opposed to self-

concealment to improve positive perception on VCT clinics accessibility.

V CONCLUSION

- 1) Since Voluntary Counselling and testing seeking behaviours are HIV infection preventive practices and this study revealed positive response from the age group 18-26, all efforts should be put in place to rescue the young adults joining the Universities in this contemporary set up where many parents are not with their children to guide them. This will help the this great nations to earn their future generation and leaders.
- 2) When the trend of VCT clinic access goes down like in 2014, (7.05%) among the females yet sexuality is at its climax at this age, there is great need for concerned. VCT clinics access need not to be linked with HIV positive status only but enhancement of positive living.
- 3) Further research on interventions strategies on safe sexual practices within this group is key to life longevity in the absence of vaccines.

VI. REFERENCE

- 1) Commission for Higher Education Newsletter (CHE), (2004). *Developing Policies and Practices for mainstreaming HIV and AIDS in situations of higher education*. Conference held at the Kenya Institute of Education on 22-24
- 2) Centre for Diseases Control (CDC) report on HIV special edition, (2012)
- 3) Golafshani Nahid, (2003). *Understanding Reliability and Validity in Qualitative Research* University of Toronto, Toronto, Ontario, Canada. The Qualitative Report Volume 8 Number 4 December 2003 597-607 , <http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>
- 4) Kenya AIDS Indicator Survey, September (KAIS), (2012). Nairobi, Kenya.
- 5) Kenya Demographic Health Survey (KDHS) report, (2014).
- 6) Krejcie, R. V & Morgan, D. W (2002). *Determining sample size for research Activities*, Educational and Psychological Measurement, 30, 607 -610. Kothari, C. R. (2004). *Research Methodology: Methods and Techniques* (2 nd Ed.). New Delhi: New Age International limited.
- 7) Leddy A, Chakravarty D, Dladla S , De Bruyn G , Darbes L, (2016) Sexual, Communication Self-efficacy, Hegemonic Masculine norms and condom use among heterosexual couples in South Africa. Feb; 28(2):228-33. Doi: 10.1080/09540121.2015.1080792. Epub 2015 Sep 7.
- 8) Tamayo, P., Slonim, D., Mesirov, J., Zhu, Q., Kitareewan & Gulub, T. R. (1999) Interpreting patterns of gene expression with self-organizing maps; Proceedings of the National Academy of Science, U.S.A. 96(6), 2907-2912.
- 9) Toska, E., Cluver, L. D., Hodes, R., & Kidia, K. K. (2015). Sex and secrecy: How HIV-status disclosure affects safe sex among HIV-positive adolescents. *AIDS Care*, 27(sup1), 47–58. <http://doi.org/10.1080/09540121.2015.1071775>

- 10) UNAIDS, (2013/14). Voluntary counselling and testing (VCT), UNAIDS technical Update. 1st Edition 11)
(Mbogua T. (2004), Responding to the special needs of children educating HIV/AIDS Orphans in Kenya. Childhood Education, 80 (6), 304 -309.
- 12) Mumah J. (2011). Socioeconomic status, women and HIV; do the determinants of female HIV vary by socioeconomic status in Cameroon? PhD Thesis, Utah state University, Department; sociology, social work anthropology
- 13) Oguta Z, Onyango Rand Orago, A.S.S (2011). Factors influencing choices and utilization of HIV testing and counseling (HTC) services in Suba District Kenya, Research Reference Number 217, GoK/ NACC Inventory of HIV/AIDS Research, Evaluation studies, Volume 2(2005-2011) Nairobi, Kenya