Influence of Selected Socio-Demographic Factors on the Response of College Students towards VCT Services: A Case of Selected Middle Level Colleges in Nairobi Province, Kenya

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Abstract: ***VCT facilities were integrated into the public health system in 2001. The facilities have not however been fully utilized especially by the youth. Based on this realization the study seeks to determine the influence of socio-demographic factors on the response of college students towards VCT services. Purposive sampling was used to select three colleges to be used in the study out of nine major colleges. This being a descriptive research, a stratified random sampling design was appropriate. More female students were aware of the VCT services 82.6% as opposed to 68.2% male while less than half of the population 45.7% were aware of the location of this facility. The study concludes that the percentage of college students who are tested for HIV is relatively low considering the effort that has been made by the government, non governmental organizations and other stakeholders in creating awareness on HIV/AIDS campaigns. One of the recommendations by the authors is that college students should be helped to deal with stigmatisation, fear and discriminations.***

Keywords: College students, VCT Response, Kenya.

1. Introduction

Even though HIV/AIDS threatens millions of lives all over the world, the situation is worse in developing countries, especially in the poor regions such as the Sub-Saharan Africa. The World Health Organization's (WHO, 1997) estimates indicated that the number of people living with the virus was 30.6 million, while new infections stood at 5.8 million in the world per year. Of the new infections, about 40% occurred among women while more than 55% was recorded for young adults aged 15-25 (WHO, 1998). While about 2.3 million AIDS deaths were recorded in 1997, it was estimated that about 12 million people have already died from the pandemic since it was first diagnosed.

Based on the trends, projections indicated that more than 40 million people would be living with the virus by the year 2010, with about 90% of the cases in developing countries (WHO, 1997). In 2009, 2.9 million people were newly infected with the virus while 33.3 million people around the world are now living with HIV/AIDS (UNAIDS, 2010). In Africa the impact is severe, at the end of 2009 one out of every ten people was infected with HIV in nine of the African counties (UNAIDS, 2010).

In Kenya, HIV/AIDS has become a critical public health problem and poses serious challenges to the country's health-care system. According to the Government of Kenya (2001), AIDS is caused by a Human Immune-deficiency Virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from secondary opportunistic diseases such as tuberculosis, pneumonia, stomach disorders among others that eventually lead to death. The virus was first diagnosed in Kenya in 1984. It was anticipated 1.8 million people would be living with HIV by 2003. In 2009 an estimated 1.5 million people were living with HIV. The national prevalence rate presently stands at 6.3% in 2009 (UNGASS, 2010), down from 10.25 % in 2002, (NASCOP, 2004). The downward revision is largely attributed to the intensive, multi-sectoral interventions spear-headed by the Government of Kenya (GoK, 2001) in collaboration with complementary sectors targeting awareness creation and sexual behaviour change.

VCT programmes were established in Kenya in 2001 and the government embarked on an intensive programme to avail VCT services to majority of the population as a component of first-line strategies to reverse HIV/AIDS trends in the country through behaviour change. Despite this, the National HIV/AIDS prevalence rate still continues to rise especially among the youth. This, therefore, means that either these services are being under-utilised or they are not making the impact that they ought to be making towards curbing the spread of HIV/AIDS. This is a sign that there is a gap of knowledge and so the determination of the impact of selected Socio-demographic factors on the response of college students towards VCT services in selected middle level colleges in Nairobi Kenya is crucial.

In Kenya, the burden of HIV/AIDS in not just a major challenge to the health-care system but also an increasing

impediment to socio-economic prosperity, as it relentlessly undermines national resources and frustrates development efforts in all sectors of the economy. It has been noted that young people account for the majority of all new infections in East and Central Africa (Population Council, 2003). Consequently efforts to curtail the spread of the infection during the youthful age will go a long way to reduce the prevalence.

The specific objective of the study was to establish the extent to which the following selected socio-demographic factors impact on the response of college students towards VCT services (a) career (b) year of study (c) gender (d) marital status and (e) religion.

2. Methodology

This being a descriptive survey study, an ex-post facto design was used to help the researcher determine the impact of selected factors on the response of college students towards VCT services. According to UNGASS, (2010), an ex-post factor design describes and interprets the situation the way it is at that particular time. One cannot manipulate or assign subjects or treatments, because the independent variables have already occurred. This design is appropriate for the study because the researcher does not manipulate any of the variables of interest and the data resulting to all variables are collected simultaneously (Bryman & Cramer, 1997). The effects have already manifested themselves.

3. Location of Study

The study was conducted in selected public middle level colleges in Nairobi Kenya. These colleges are Kenya Technical Teachers College, Kabete Technical Training College and Kenya Medical Training College. The three colleges were purposefully selected based on the willingness of the respective administration to participate in this study. Middle level public colleges were also found to be the best for this study because they have students from all socio-economic background. They were also found to have a higher representation of students from different parts of the county unlike the private commercial colleges that are only accessible to people of higher socio-economic class and those who reside in Nairobi. Nairobi Province was also selected because of ease in accessibility during data collection it is also convenient to the researcher.

4. Population of the Study

The total population of this study was 1000 college students. Kenya Technical Teachers College had 350 students, Kabete Technical Training College 250 students and Kenya Medical Training College 400 students (Table 1).

Table 1: Breakdown of male to female students in each college

Selected Colleges	*Male*	*Female*	*Total*
Kenya TTC	220	130	350
Kabete TTC	160	90	250
Kenya MTC	180	220	400
Total Students	560	440	1000

Source: Admissions office; Kenya TTC, Kabete TTC, Kenya MTC

5. Sampling Procedures and Sample Size

It is imperative that samples be as representative as possible, because too small a sample is likely to yield under-estimated information due to the effect of sampling error. Samples are drawn from well-defined lists of the target population known as the sampling frame. According to Nassiuma (2000), a representative sample size can be drawn using the relation:

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

Where N= Population size=1000, n=sample size, C= Co-efficient of variation, and e= the error margin. In this study, C=30% and e=2%.

This leads to a sample size of 190 which was rounded up to 190 college students, out of the population of 1000 college students.

A stratified random sampling frame was prepared in consultation with the institutional authorities based on gender. In stratified sampling, the population is divided into two or more groups then a given number of cases are randomly selected from each population subgroup (Mugenda and Mugenda, 1999). The total sample size for Kenya TTC 65, Kabete TTC was 47, Kenya MTC 78 (table 2). The total questionnaires distributed were 190.

Table 2: Targeted Number of Students in the Three Colleges

Targeted no	*Male*	*Female*	*Total*
Kenya TTC	41	24	65
Kabete TTC	30	17	47
Kenya MTC	33	45	78
Total	104	86	190

Questionnaires were used in this study. Self-administered questionnaires provided some degree of confidentiality and they motivated the college students to inscribe their thoughts and opinions freely. The data was qualitatively explained according to the questions and objectives of this study. Comparisons between responses were also done to bring out similarities and dissimilarities among them. The data was analyzed by use of frequencies, percentages, means, tables and graphs. The data collected was recorded and analyzed by use of computer programme Statistical Package for Social Sciences (SPSS). Obure (2002) claims that SPSS for widows is the most commonly used statistical software package for statistical analysis of data.

6. Research Findings

A total of 188 questionnaires were returned out of the 190 distributed.

Table 3: Year of Study and Testing for HIV/AIDS

Year of study	*Response*	
	Yes	*No*
First year	14 (87.5%)	2 (12.5%)
Second year	36 (58.1%)	26 (41.9%)
Third year	47 (49.0%)	49 (51.0%)
Total	97 (51.6%)	77 (40.9%)

From Table 3, 87.5% of first year have been tested. It is important to note that the frequency was low. The third year students were expected to have acquired more knowledge with time. However, the study reveals that barely half of them (49.0%) are tested. The assertion that, "there is less acceptance of testing among the educated" maybe applicable in this study.

7. Gender and Testing for HIV/AIDS

The results in Table 4, shows that there were more males tested for HIV than females. The study noted that with a slight percentage, the males who were tested were more than the females 58.9% to 54.2%. The total numbers of college students who are tested are 57.0% against those not tested 43.0%. This means the male students are more positive towards VCT services than the male. VCT service providers must think of a way to make the VCT services appealing to females too.

Table 4: Gender and Testing for HIV/AIDS

Gender	*Response*		
	Yes	*No*	*Total*
Male	63 (58.9%)	44 (41.1%)	107 (100.0%)
Female	39 (54.2%)	33 (45.8%)	72 (100.0%)
Total	102 (57.0%	77 (43.0%)	179 (100.0%)

According to the results in Table 10, 45.8% of the female students are not tested for HIV. Almost three decades after the first HIV case was reported, and with the aggressive media and government campaigns against HIV, the acceptance of testing remains low especially among the female. In developed countries, the acceptance levels vary widely depending on race, socio-economic status and education level (3-100%) (Irwin,Valdiserri and Holmberg, 1996). In the developing world, VCT uptake levels among pregnant women range from 33-95%, with little known about other women (Van der Straten *et al*., 1995). Some factors associated with low acceptance include fear of false positives, stigmatization, domestic violence, separation and divorce. These could be the same factors at play in the current study population. Of particular concern is the social status of women among the population studied. In a study in Botswana, 14% of the women studied had to get husband's consent before testing (USAID, 2003). Women are believed to take second class from men, and are therefore not free to make their own decisions as concerns HIV (Olley, 2003).

Interestingly, most of the female students who reported having been tested for HIV did so because of compulsory reasons like child birth, school requirement, and insurance requirements. Future interventions need to draw a distinction between voluntary and involuntary testing. It is the researchers' view that voluntary testing has not been fully accepted in Kenya, and what is in existence may be termed as "involuntary or prompting testing". The picture is not different from other populations; in the United States, for example some of the reasons for testing include insurance coverage (Gaillard *et al.*, 2002).

8. Marital Status and Testing for HIV/AIDS

The results from the study reveals that the majority of college students were Single 123 (65.1%), married 57 (30.2%), divorced 4 (2.1%) and separated 3 (1.6%), (see Table 5). The results in Table 10 show that 59.3% of those who were single were tested and 40.7% not tested, this figure is still high considering the times when everyone is being called to take the test. It was also interesting to not that 35.0% of those married have not taken the test. It is a requirement in most churches to be tested before getting married not only in churches but awareness has been created and before marriage it is necessary to take a test. Pre-marital testing for AIDS is necessary for all couples planning to get married (Dixon, 1994). This helps the couple to be aware of their HIV status and decide what steps to take. The fact that there are people who still get married without the test shows minimal behavior change despite the HIV/AIDS awareness and VCT services. It was also interesting to note that those who tested did so involuntarily; this is because they tested for reasons such as to get married or they had to be tested because they were pregnant or it was required by school or college.

Table 5: Marital Status and Testing for HIV

Marital status	*Freq*	*Response* *Yes*	*No*
No Response			
Single	123	73 (59.3%)	50 (40.7%)
0 (0.0%)			
Married	57	23 (40.4%)	20 (35.0%)
14 (24.6%)			
Divorced	4	0 (0.0%)	1 (25.0%)
3 (75.0%)			
Separated	3	1 (33.3%)	2 (66.7%)
0 (0.0%)			
Total	187	97 (51.9%)	73 (39.0%
18 (9.6%)			

9. Religion and Testing for HIV/AIDS

The respondents were also drawn from different religions. The results in Table 6, show that though students professing protestant religious faith were the most with 83 (44.9%), there was a good number of catholic's in all institutions comprising 73 (39.5%) of the total population. The least were Muslims with 18 (9.7%) and others 11 (5.9%).

Table 6: Tabulation between Institution and Religion

College	*Religion*		
	Protestants	*Catholic*	*Muslim*
Others	*Total*		
KabeteTTC	21 (43.8%)	21 (43.8%)	6 (12.5%)
0 (0.0%)	48 (100.0%)		
KMTC	28 (37.8%)	36 (48.6%)	4 (5.4%)
6 (8.1%)	74 (100.0%)		
KTTC	34 (54.0%)	16 (25.4%)	8 (12.7%)
5 (7.9%)	63 (100.0%)		
Total	83 (44.9%)	73 (39.5%)	18 (9.7%)
11 (5.9%)	185 (100.0%)		

The researcher wanted to find out how religion has impacted on access and commitment towards accessing VCT services. Protestants, Muslims, Catholics and other religions were focused by the researcher. According to this study, the category which had a high number tested was the Protestants 63.8% (53) within this group. Catholic was the second highest group with students who were tested 52.1% (38), Muslims 38.9% (7) and finally others 27.3% (3). In total, 53.7 % were tested based on different religions and 44.7% were not.

These results were derived from cross tabulation of religion and 'have you been tested for HIV' questions as seen in Table 7. Christians comprise 70% to 80% of the population in Kenya. Everybody including the church has a role to play in the AIDS pandemic (WHO, 1998) Churches should promote beliefs that guide behavior.

Table 7: Religion and testing for HIV/AIDS

Religion	Freq	Response	
		Yes	No
Protestants	83	53 (63.8%)	30 (361%)
Catholics	73	38 (52.1%)	35 (47.9%)
Muslims	18	7 (38.9%)	11 (61.1%)
Others	11	3 (27.3%)	8 (73.7%)
Total	185	101 (54.6%)	84 (45.4%)

Protestant and catholic religions were more receptive to VCT services than Muslim religion. Majority of Muslims did not undertake AIDS testing and knew little on VCT services. According to other studies, religion was also the reason for avoiding premarital relationships among the university students in the United Arab Emirates in the study of Ganczak *et al*. in 2007. In the study by Yarber, Milhausen, Crosby, & DiClemente, (2002) sex before the age of 15 and regular smoking were associated with non-condom use by the males. Almost one fifth of the students reported that they did not know whether they were HIV positive. One quarter of them had been tested against HIV. The reason to have a test was in most cases security. The number of tested Finnish (23.1%) and Kenyan students (43.8%) was higher than that of the Indian students (10%) in the study by Pelzer, Lehnert, Lotz, (2004). It is important for the service providers to encourage those of Muslim faith to embrace the services in a bid to curb the rise of HIV. Churches should also be encouraged to have VCT awareness activities to be able to encourage more people to take the services and hence behavior changes to curb the spread of HIV/AIDS.

10. Conclusion

The response of the college students towards VCT services is relatively low. Only 57.0% have been tested, 43.0% have never been tested for HIV. This figure is too high considering the effort that has been made by the government, non governmental organizations and other stakeholders in creating awareness and HIV/AIDS campaigns to encourage the uptake of these services. This shows that awareness campaigns are not fully effective. There is need to translate this knowledge into action. College students should be helped to deal with stigmatisation, fear and discriminations as a result of a positive HIV result by inviting those who have used the services to share their experiences.

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