# Attitude of the Youth towards People Living With HIV/AIDS (PLWHA): The Case of Cape Coast Polytechnic

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## Abstract

Various forms of stigma exist as far as HIH/AIDS is concerned. Its infection is usually related to promiscuous lifestyles though that is not the only means by which it could be contracted. Its effects include high bills on medications, nutrition, diets, funerals and welfare related support systems in addition to loss of productive time and energy from care-givers. Stigmatization and associated discrimination creates the vicious cycle by which infected persons spread the disease. This study therefore intends to ascertain the attitudes of students with respect to stigma and discriminating attitudes such as friendship, sex-mating and marriage. It is a case study of students in Cape Coast Polytechnic, Ghana. Four hundred and sixty-six students were involved. Stratified sampling technique was used to sample the target population. Questionnaire was utilized to solicit data. SPSS version 21 was used to analyze the data. Cross- tabulations and chi-square tests were used to analyze the data. Associations between demographic variables such as gender, age, settlement type, programme of study and school in institution versus attitudes were sought. The study found that 91.8 percent polytechnic students were aware of the existence of HIV/AIDS. There was 67.31 percent negative attitude in terms of choosing a spouse and sixty percent negative attitude in separating with PLWHA as spouse. Geographic region and settlement type could affect the attitude of students towards PLWHA. It is recommended that the management must have a policy on stigmatization and discrimination to make students' associations organically and intrinsically part of HIV/AIDS education programmes in the institution.

Key words: discrimination, HIV-positive, PLWHA, stigma,

### **1.0 Introduction**

Globally, various kinds of stigma exist in relation to HIV/AIDS. The avoidance of HIV infected persons, stigmarelated violence, quarantining HIV-infected persons, and compulsory HIV testing with or without victims consent or protection of confidentiality are some of the stigma associated with HIV/AIDS victims (UNAIDS, 2006; Ogden & Nyblade, 2005). This is because the pandemic has been a great-threat to numerous lives, health, society culture and economies. It affects the most productive ages of nations, usually between 15 and 49 years (Ghana Aids Commission, 2000).

Research has shown that HIV has its origins from West-central Africa between the 1890's and 1910's. In the United States, the Centre for Disease Control and Prevention (CDC) discovered the disease in 1981, as well as its cause and infection in the early parts of the 1980's (Gallo 2006). By 2012, the globally infected figure stood at about 35.3 million people. Thirty-six million persons had already died worldwide by the close of the same year (UNAIDS, 2013).

In Ghana, the pandemic increased from 2001 to 2003 and decreased by 2004. The national prevalence rate rose from 2.3% in 2001 to 3.4% in 2002, declining from 3.6% in 2003 to 3.1% in 2004. Currently the prevalence rate is less than 2% (Ministry of Health, 2004; Ghana Aids Commission, 2013).

After initial contraction, HIV develops into acute retroviral syndrome, also referred to as primary HIV or acute HIV (Mandell, Bennet & Dolan, 2010; WHO; 2007)). This is followed by the clinical latency stage also referred to as asymptomatic HIV or chronic HIV (Stages of HIV, 2010), lasting from between three years and over 20 years (Springer, 2001). The latter parts of this stage in characterized by fever, weight loss, gastrointestinal difficulties and muscle pains (Stages of HIV, 2010). This condition finally progresses to AIDS, with CD4<sup>+</sup>T cell count less than 200 cells per  $\mu L$ . Specific diseases may also occur in addition to the HIV infection. It can be transmitted through various means.

HIV may be transmitted through sexual contact, from mother to child during pregnancy, during delivery of the baby or through breast feeding. It may also be transmitted through infected body fluids such as blood and through body tissues. However, contact with nasal secretions, saliva, faeces, sputum, urine, tears, and sweat

does not transmit HIV. Unless vomit or saliva is contaminated with blood, contact does not lead to transmission of the infection (Markowitz, 2007; Kripke, 2007).

As a cause of the HIV/AIDS disease, HIV is the retrovirus that fundamentally attacks the human immune system, indirectly or directly destroying the immune components such as CD4+T cells, dendritic cells and macrophages (Alimonti, Ball & Fowke, 2003). Though it can be treated, the condition has no cure. For this reason, the morbidity and mortality rate among societies is very high. HIV/AIDS therefore affects the economies of both countries and individuals (Mandell, Bennet & Dolan, 2010), diminishing the gross domestic products of various countries. Human productivity and efficiency and industrial effectiveness are also affected due to deaths and absenteeism. Other negative effects of HIV/AIDS are high bills on medications, nutrition, diets, funerals and welfare related support systems in addition to loss of productive time and energy from caregivers. For these and other reasons people try to play it defensive by avoiding these victims. Discriminating and stigmatization has been the consequence (Norwegian Church Aid, 2006). People try to avoid these victims as friends, sex-mates and as marriage partners. As potential spouses, the youth need to be studied as to how they may interact with HIV/AIDS victims as potential sex-mates, friends or spouses. Such attitudes will go a long way to help identify ways by which such tendencies may be prevented if not curtailed, for the more they are discriminated or stigmatized, the more they hide their status, and the higher the risk of spreading the disease to the larger society. Creating a database on such attitudinal tendencies will also assist in future assessment and investigations for comparative and contrasting studies.

## 1.1 Aim and objectives

The aim of the study was therefore to identify how far people can go in discriminating against HIV/AIDS victims. The specific objectives were to:

- 1. Determine the awareness of Polytechnic students on the reality of HIV/AIDS
- 2. Identify the attitude of students towards people living with HIV/AIDS (PLWHA)

#### 1.2 Research questions

Based on the objectives of the study the following research questions were considered:

- 1. What is the belief of students concerning the reality of HIV/AIDS?
- 2. What is the attitude of students towards befriending HIV/AIDS infected persons?
- 3. How are students ready to marry HIV/AIDS infected persons if she/he has the option not to?
- 4. What would students do if her/his platonic friend should be infected with HIV/AIDS?
- 5. What would students do if her/his sex-mate should be infected with HIV/AIDS?
- 6. What would students do if her/his future/current spouse should be HIV/AIDS infected?

#### 1.3 Study area

Cape Coast Polytechnic located in Central Region of Ghana was selected for the case study. It is one of the HIV/AIDS endemic regions in the country. The Region has two public tertiary institutions, Cape Coast Polytechnic and the University of Cape Coast. The Polytechnic has a population of about three thousand, with students from all the regions in the country. It is about seven kilometers from the Cape Coast castle. Cape Coast boasts of some of the first second cycle institutions in Ghana. Students in the polytechnic are both, residential and non-residential prone to effects of external and internal campus life and behaviour.

### 2. Literature review

This section discusses HIV/AIDS stigma in general and Ghana in particular. It also dilates on empirical work in relation to studies in Ghana.

### 2.1 HIV/AIDS stigma in Ghana

Keba (2011) explains stigma as a tattoo mark branded on the skin of an individual for committing an offence. It was used by the Greek in their early civilization period. The aim was to avoid the person by society as pay back

to the wrong committed. Stigma therefore begets prejudice and discrimination against an individual or a group of persons. A stigmatized person is therefore considered inferior, incapable, morally deficient, distasteful or blackballed. He/she is discredited by society. He/she is also differentiated from societal membership as a result of some particular different characteristic as compared to other members of the mainstream society (Keba, 2011).

Globally HIV/AIDS victims are stigmatized. The stigma and its consequential discrimination and prejudice are exhibited in diverse ways in different individuals, groups, communities, institutions and countries (Baffoe, 2013). In India, there is a report that patients with AIDS were seen as nonentities by families and friends. They were quarantined, not given the opportunity to see or be seen by relatives and friends (Keba, 2011). AIDS victims are therefore sometimes rejected, ostracized, avoided, and tested without prior consent or confidentiality.

In Ghana the transmission of HIV is believed to have primarily originated from heterosexual intercourse though in some countries homosexual intercourse has been considered to be the initial course of the HIV/AIDS pandemic. Basically Ghanaians also consider HIV/AIDS as a result of immoral behaviour, sexual immorality, prostitution and other sexual promiscuity. The disease is therefore considered as divine punishment. Thus HIV/AIDS stigma may be viewed as resulting from cultural values, ignorance and family system norms and values (Keba, 2011). Stigma is therefore as a result of misconceptions and dangers related to the disease due to societal, family and cultural norms and beliefs in relation to these deviant acts (Keba, 2011)..

There is a collective and mutual responsibility to family members in Ghana. Thus the offence, punishment and disgrace of a family member are directly or indirectly linked to other family members or the family as a whole. Hence there is a collective responsibility system of praise and blame. Thus if a family member is infected or dies of HIV/AIDs the entire family becomes stigmatized. Family members are therefore encouraged through such blame-agenda by the community or society to hide their HIV/AIDS status in order to avoid societal rejection (Keba, 2011).

According to Keba (2011) the fear of getting HIV/AIDS when one associates with HIV/AIDS person, in itself, is a risk factor to the permeation of the disease to a large section of the society. This is due to ignorance because AIDS is not contagious though infectious. Both Africans and people of other parts of the globe have this ignorant belief. This may be due to the fact that people with the HIV/AIDS are often looked down upon. They may even loose their jobs. People refuse to eat, drink from same cup with them. Sometimes even comb and pomade are not shared with them. This ingrained fear also prevents people from shaking hands and eating from the same bowl with HIV/AIDS victims. Sleeping with them may be considered a great abomination. People ignorantly believe that engaging with such victims in any of these acts could lead to contraction of the disease (Keba 2011).

It appears the fear of getting HIV/AIDs also prevents people from befriending, having sexual-intercourse or marrying victims of the infection. Empirical literature has disproportionately testified to this assertion. Investigating into these attitudes among the youth could therefore help in removing some of the impediments to the prevention of transmission of the disease.

# 2.2 Empirical Studies on HIV/AIDS

Though studies on HIV/AIDS related to attitudes towards friendship and marriage have been disproportionately documented, there are some studies done on other attitudes towards victims. According to Woode and Ahorlu (2007) 72% of Accra Polytechnic students knew the difference between HIV and AIDS while between 2 and 20% did not know much about the mode of transmission; between1 and 14% were not sure about the mode of transmission. The study also indicated that 2% thought that handshake and sharing common cups, plates and spoons could lead to infections; one to 6 percent was not aware that both heterosexual and homosexuals were equally at risk; 1 percent of those studied thought insect bite could cause HIV infection. While 3 percent were not aware that sharing syringes and sharp edge instruments could lead to infection, 3 percent were unsure. Ignorance and uncertainty ranged from 1 and 27 percent among the respondents. While 9 percent were not aware that multiple-sex was a course, 17 percent thought patrons of prostitutes were not at risk.

The study further revealed that 30 percent of those studied had had sexual relations before, though 40 percent of these never used condom. Ten percent of these never used any means of protection. Ten percent of these though that partners were not HIV positive though they had no evidence to support their stand. Ten percent

thought their partners were not positive though they had no evidence to support their stand. Ten percent were of the view that they had known their partners for a long time to be faithful and therefore were HIV negative. Twenty nine percent of those who had sex partners, indicated they were not afraid of contracting the disease. While 79% had had sex with one partner, 21 percent had had sex with two or more partners. Four percent were married.

Another study by Achio (2005) in Accra Polytechnic showed that the awareness of students on HIV/AIDs was 100 percent though only 63 percent, on the average understood the concept of HIV/AIDS awareness. The study also showed that all persons are at risk. The study further showed that 80 percent of the students were of the view that all persons were at risk. It was further revealed that female students felt shy discussing matters concerned with HIV/AIDS as compared with their male counterparts. Females also had relatively poor understanding on the subject.

According to the Ghana Multiple Indicator Cluster Survey (MICS, 2011) only 6% women and 15% men expressed no stigmatization towards people living with HIV/AIDS. The following four questions were posed:

- 1. Would you care for family member sick with AIDS?
- 2. Would you buy fresh vegetables, from a vendor who was HIV positive?
- 3. Do you think that a female teacher who is HIV positive should be allowed to teach in school?
- 4. Would you want to keep the HIV status of a family member a secret?

In the rural areas the response was 5% women and 9% men: Among the illiterates it was 2 percent women and 5 percent men. In the case of the poorest 3 % were women while 7 percent were men. According to the study 34 percent women and 39 percent men have in-depth knowledge about HIV transmission. The study showed that a large number of people expressed stigma to the four questions posed. It was therefore concluded that Stigma in relation to attitudes among Ghanaians exists in reality.

In relation to attitudes towards friendship, marriage and sex mating of people living with HIV/AIDS in Ghana much is not yet known. Moreover, in terms of such investigations among the youth and also students in tertiary institutions, nothing is yet known. These call for scientific investigations.

### 3. Methodology

As a case study, Cape Coast Polytechnic was selected. The Polytechnic has three schools and thirteen departments. Only higher national diploma students from level 100 to 300 (and final) year were considered. Sixteen students from each class participated in the study. A total of four hundred and eighty students therefore took part at a response rate was 97.1 percent.

The study was principally quantitative, though making use of closed- and open-ended questions to gather data employing a questionnaire. The random probability sampling method was utilized through the lottery and stratified techniques after determining the target population, sample size, and sampling frame. Statistical Package for the Social Science (SPSS) software (version 21) was used to analyze the data. Both qualitative and descriptive statistical tools were employed to analyze the data. Data were displayed utilizing tables, frequencies and ercentages. Demographic data explored include gender, age, and region. The rest are level in institution, marital status, department and school in the institution. Six other questions leading to students' attitudes were posed in the questionnaire.

Association tests were made in relation to gender, age, settlement type, programme, school, region of residence and marital status each on one hand and respondents' attitude on the other. Attitudes include belief that HIV/AIDS is real, having platonic friendship with PLWHA, marrying PLWHA; separating friendship, sexmating and spousal relationship with PLWHA. Chi-square  $(x^2)$  statistical tool was therefore adopted in this regard to determine the level of association between variables. Exact significance level of 0.05 was used to compute Pearson's chi-square coefficients, actual and expected counts, in addition to minimum expected counts. For 2x2 tables, continuity correction factor was used dwelling on Yates' correction for continuity (Pallant, 2005). Cross tabulations were also employed in the analyses.

### 4. Results and discussion

This section is made up demographics of respondents, cross-tabulations and chi-square analyses. Results were also discussed in the section.

#### 4.1 Demographic distribution

Out of the 466 students studied 65.2 percent were male and 34.8 percent female. This indicates a good representation of the student population of which there are 63.1 percent male and 31.9 percent female (Planning Office, 2014). The range of age was between 16 and 40. The mean age was 23 years 11 months, median 24 years and modal age 13 years. The Central Region, in which Cape Coast Polytechnic is located, had 26.9 percent respondents, being the highest while the Upper East had the lowest number of students with 3.2 percent.

Thirty five percent of students were in level 100, 35.6 percent in level 200 and 29.5 percent in level 300. This also indicates a good representation of the sample considering that the distribution of the entire student population were level 100, 38 percent; level 200, 28.6 percent and level 300, 30.5 percent (Planning Office 2014). Marital distribution was as follows: married 15.0 percent; single 58.1 percent and those in a relationship 26.9 percent. Marketing students recorded the highest at 16.7 percent while the lowest proportion (2.6percent) was from Statistics department. In terms of departmental distribution, this is not a good representation since accountancy and fashion respectively, rather constitute the highest and lowest departments in the institution. This anomaly is due to the fact that many of the accountancy students did not return their questionnaires; they had the lowest response rate. Fashion rather had the highest response rate. The response rate of school of engineering was the highest in terms of schools in the institution with 40.8 percent. School of Business was 33.7 percent while 25.5 percent of the respondents were from School of Applied Arts and Science.

### 4.2 Belief that HIV/AIDS is real

About 92 percent of the respondents were of the view that HIV/AIDS is real and exists. Various reasons were given. For those who said HIV/AIDS was real, reasons include having seen HIV patients, doctors report on victims, the belief that doctors have evidence that AIDS is real, the disease is deadly and can therefore kill having heard a lot that HIV/AIDS is real, having heard from HIV patients coming out publicly to testify, could be transmitted, having heard it has killed a lot of people, transmitted by virus, it is a concern to the international community, from television adverts and the media (print and electronic), having a friend or relation or someone who has been infected, that it has killed many people, knowing people who have died of the disease, and having seen people with HIV/AIDS both in homes and hospitals.

For those who did not believe of the reality of HIV/AIDS majority were of the view that they had not encountered the condition themselves and therefore their belief. This level of ignorance is within the findings of Wood and Ahorlu (2005) that between 1 and 27 percent of Accra Polytechnic students were ignorant on issues concerning HIV/AIDS. They recommended that HIV/AIDS awareness leading to change in attitude should target workshops. However this study has shown that the use of advertisement both prints and electronic media and campaigns when used could go a long way to inform people on the reality and the existence of HIV/AIDS. The use of campaigns to educate the student body as a pragmatic approach (Wood & Ahorlu 2005; Shailesh, Analita, Yogini, Putharaga, & Amiye, 2004) using people who have been infected could have greater influence on the belief in the reality of HIV/AIDS and consequential attitudinal change.

### 4.3 Attitude towards PLWHA

On the issue as to whether students would choose an HIV infected person as a platonic friend about 66 percent of respondents responded in the affirmative. This group was of the opinion that speaking to a HIV/AIDS patient does not cause transmission of the disease. They gave the following reasons: 'we are all humans and need to be treated equally;' 'platonic relationship does not transfer the viruss unto someone;' 'that man should love one as oneself;' that staying with one does not transfer the virus,' that 'it is blood contact that may transmit the virus'; that 'the victims may need other people physically, emotionally, psychologically in their difficult situation;' 'out of love for humanity to make them happy;' that 'HIV/AIDS is transmitted sexually;' 'they (PLWHA) need advice, encouragement and support;' 'to avoid discrimination;' and 'to provide comfort and hope.'

About thirty-three percent of the respondents thought otherwise, that having platonic relations with HIV/AIDS victims could cause transmission. Though awareness creation has been adopted as a first line of action in the prevention of HIV/AIDS the study has shown that many students (32.8) were not aware that befriending someone with HIV is not a mode of transmission (Ministry of Health, 2001) In the findings of Woode and Ahorlu (2005) 30 percent of Accra Polytechnic students had had sexual relations before. This might be as a

result of their ignorance on the mode of transmission of the disease and also that sexual activity is one of the major ways by which the disease could be transmitted. The findings of this study therefore affirm the fact that many polytechnic students (30 percent) are ignorant of the mode of transmission of HIV/AIDS. Reasons given include being infected when one befriends HIV/AIDS victim, fear of public ridicule and as preventive measure were 71.0.5 percent, 23.68 percent and 5.27 percent respectively.

When respondents, were asked if they would choose HIV victim as a spouse, 16.9 percent responded in the affirmative while 83.1 percent disagreed. For those who would marry HIV infected person's reasons were religions (52 percent), moral (19.7 percent) and humanitarian (28.3 percent). That they are also human beings, out of love, they also need sex were some of the reasons given. About 90 percent of the 87.1 percent were of the view that they would be infected when they marry HIV persons. They would do so as a preventive measure for themselves and unborn children. The remaining 10 percent said they would not marry without having sex with their partner. This was a secondary reason for not marrying an HIV infected person. This percentage is knowledgeable about one of the major means by which the virus can be transmitted. Marriage without sex has the sibling effect where partners live like a brother and a sister. This may, in effect, not constitute marriage. Thus marriage couples are likely to have sex no matter how unattractive the two may be. Not all married couples may be self-controlled enough to use condoms, particularly in the long term. Marrying a partner who has the HIV virus could be tantamount to perpetuating the spread of the disease. In the view of these respondents this may not be helpful to individuals and the general society at large. It is surprising that therefore that 55.4 percent of the respondents would separate with their sex mates (not spouses) if they found the other were HIV-positive. The remaining 44.6 percent however would not.

The behaviour of people not using condom is attitudinal. A study by Achio (2007) and Woode & Ahorlu (2005) supports this fact. Between 35 percent and 40 percent of Accra Polytechnic students who had had sexual relations had never protected themselves. Thus many people have the attitude of not using condom. If condom use can be propagated enough then the issue of not marrying a person with HIV/AIDS would not be a serious problem. While religions leaders might encourage abstinence among married couples as a preferred means of combating HIV/AIDS this is discriminatory as far as marrying HIV/AIDS victim is concerned. The idealness and spiritual reason is not enough to support this view. According to Achio (2007) it has been explained that sexual intercourse is one sure means by which couples could contract HIV/AIDS, though it could be transmitted through blood transfusion and cuts, for example. For this reason safe sex using condom is one of the reliable ways by which HIV/AIDS could be prevented. However the issue of child-bearing could prevent people from marrying HIV/AIDS victims and this is cultural.

In Ghana, couples without children are stigmatized as barren. The average Ghanaian society does not tolerate barren couples. They are rejected, castigated and branded as irresponsible. The pocket of the average Ghanaian cannot support in-vitro fertilization, which also protects the man but not the woman. These might be some of the reasons why some people may not marry people living with HIV/AIDS. Thus the interplay of attitude and culture could play a role to prevent people from marrying people living with HIV/AIDS. On the issue of bringing forth children with HIV persons, this is due to ignorance since treatment is available for mother-to-child transmission of the disease though it is on record that women in particular, with the AIDS virus or disease are advised not to, and or discouraged from giving birth since their children can be infected (Achio, 2007).

For those who would separate with their sex-mates over 80 percent was for fear of infection. They assumed that they were presently not infected. Only 8.3 percent would seek counseling before taking a decision on separation. The remaining would separate because their mates had cheated on them. This is due to ignorance since sexual relations is not the only means by which HIV/AIDS is transmitted. Those who would not separate would do so on religious (54.7 percent), humanitarian (38 percent) and moral (7.3 percent) grounds.

The study has also shown that majority (59.9 percent) of respondents would not leave their spouses if found with HIV/AIDS. About 40 percent of this figure would stick to their marriage for religious reasons, (56.4 percent) for humanitarian, (27.8 percent), moral (5 percent) while the remaining 10.8 percent was uncertain.

### 4.4 Chi-square analysis

This section presents and discusses the cross-tabulation results. The corresponding chi-square analyses between demographic characteristics of students and attitudes towards persons living with HIV/AIDS (PLWHA) were also considered.

#### 4.4.1 Gender versus attitudes

Cross-tabulation analysis showed that 91.4 percent male and 92.6 percent female believe that HIV is real (table 1). The analysis gave a minimum expected count of 13.27 with significance value of 0.785. Thus the association between gender and belief in the reality of HIV is not significantly. This implies that the proportions of male and female polytechnic students' belief that HIV/AIDS is real are not significantly different.

Gender	1	4		В		С		D		Е		F
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Male	91.4	8.6	66.3	33.7	17.0	83.0	53.5	46.5	40.1	59.9	52.3	47.7
Female	92.6	7.4	68.8	31.2	16.8	83.2	58.6	41.4	40.1	59.9	55.6	44.4
Total	91.8	8.2	67.2	32.8	16.9	83.2	55.4	44.6	40.1	59.9	53.3	46.7

Table 1: Cross tabulation of gender and attitudes towards HIV-positive persons

Legend: A=Belief that HIV/AIDS is real; B=Befriending HIV/AIDS-infected person; C=Marrying HIV/AIDS-infected person; D=Separating with HIV/AIDS friend for becoming infected; E=Separating with HIV/AIDS sexmate for becoming infected; F= Separating with HIV/AIDS-infected person for becoming infected.

Over 66 percent male and 68.8 percent (table 1) female polytechnic students would befriend platonically an HIV-infected person. The chi-square analysis revealed a minimum expected count of 51.53 with 0.67 significance value. This means that the difference in gender response is not significantly different in terms of willingness to befriend HIV infected persons.

Between gender and separation of friends (platonic) chi-square results showed minimum expected count of 74.74 and 0.408 significance level. Thus there was no significant difference between the proportions of males and females (table 1) who participated in the study. This implies that the decision to separate with a friend with HIV infection is not significantly different among male and female students.

Seventeen percent male and 16.8% female (table 1) would marry an HIV positive person if they knew. Using chi-square analysis, the minimum expected count was 27.24 at 1.0 significance value. This is an indication that the proportion of male polytechnic students who would marry an HIV positive person is not significantly different from their female counterparts.

The study also showed that 53.5 percent male and 58.6 percent female (table 1) would respectively separate their sex mates if found HIV positive. Using chi-square to analyse the distribution, the study has shown that the difference in gender response of the polytechnic students was not significant. Thus larger portions of male and female would separate with their sex mates when found HIV positive.

The study also gave a minimum expected count of 60.94 at significance value of 1.0. About forty percent female and male would separate with their spouse if found HIV positive was 40.1 percent. About 60 percent of both male and female would not. The study has therefore suggested that the proportion of female who would take this decision is not significantly different from male students.

### 4.4.2 Age versus attitudes

The study revealed that the range of proportions that exhibited positive attitudes towards HIV- positive persons was between 13.3 percent and 100 percent (table 2). The minimum expected counts ranged from 0.17 to 0.9. However chi-square could not be used to determine associations between age and attitudes of students towards HIV positive persons. This is in agreement with Woode and Ahorlu (2005) that age is not a significant factor in explaining the attitudes of students towards people living with HIV/AIDS.

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Age		A*		B*		C*	Ι	)*		E*		F*	
(Years)	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Very Low	87.5	12.5	65.0	35.0	21.3	78.8	52.6	47.4	41.9	58.1	50.6	49.4	
(<20)													
Low	92.6	7.4	68.1	31.9	14.6	85.4	56.9	43.1	39.9	60.1	55.8	44.2	
(21 – 25)													
Average	91.2	8.8	63.1	36.9	16.1	53.9	54.7	45.3	41.1	58.9	53.5	46.5	
(26 - 30)													
High	100	0	85.7	14.3	13.3	86.7	38.5	61.5	46.2	53.8	33.3	66.7	
(31 – 35)													
Very High	100	0	50.0	50.0	50.0	50.0	50.0	50.0	0.0	100.0	50.0	50.0	
(> 35)													
Total	91.6	8.4	66.7	33.3	16.3	83.7	55.0	45.0	40.6	59.4	53.3	46.5	

Table 2: Cross tabulation between age and attitudes of students

Legend: A=Belief that HIV/AIDS is real; B=Befriending HIV/AIDS-infected person; C=Marrying HIV/AIDS-infected person; D=Separating with HIV/AIDS friend for becoming infected; E=Separating with HIV/AIDS sexmate for becoming infected; F= Separating with HIV/AIDS-infected person for becoming infected.

#### 4.4.3 Region versus attitudes

On crosstab between region and belief in HIV/AIDS, the region that recorded the highest positive attitude was Eastern Region with 97.5 percent; the highest negative attitude was Ashanti Region with 17.6 percent (table 3). The minimum expected count recorded was 1.23 and 0.54 significance value. Association between the two variables could therefore not be established. When region was cross-tabulated against befriending HIV-positive persons, 80 percent (highest) of students from Upper East responded in the affirmative. The least percentage (35.3 percent) in the affirmative was from Ashanti Region (refer table 3). The minimum expected count was 4.92. No association was therefore established between the two variables. The cross-tabulation analysis between region and marrying HIV-positive persons showed that in Ashanti Region, majority of polytechnic students (94.1 percent) would not marry an HIV-positive person (refer table 3). On the other hand majority of Polytechnic students from Bono-Ahafo Region (70 percent) would not marry persons with HIV virus. However an association could not be established between the two variables, since the minimum expected count was 2.54.

Region	А			В	С		Ι	)	Е	F
	Yes	No	Yes	No	Ye	es No	Yes	s No	Yes	No Yes No
Upper East	86.7	13.3	80.0	20.0	20.0	80.0	35.7	64.3	28.6 71	4 33.3 66.7
Upper West	89.7	10.3	69.0	31.0	27.6	72.4	42.3	57.7	20.0 80	.0 44.8 55.2
Northern	95.1	4.7	73.2	26.8	17.1	82.9	63.2	36.8	41.0 59	.0 58.5 41.5
Bono-Ahafo	90.0	10.0	70.0	30.0	30.0	70.0	47.4	52.6	22.2 77	45.0 55.0
Ashanti	82.4	17.6	35.3	64.7	59.9	40.1	70.6	29.4	25.0 75.	0 70.6 29.4
Volta	86.8	13.2	63.2	36.8	13.2	86.8	48.6	51.4	32.4 6	7.6 44.7 55.2
Western	91.1	8.9	71.1	28.9	17.6	82.4	60.9	39.1	45.9 54	.1 58.0 41.8
Eastern	97.5	2.5	60.0	40.0	23.1	76.9	55.6	44.4	30.6 69	.4 57.5 42.5
G. Accra	91.8	8.2	94.5	25.5	23.4	76.6	53.2	46.8	33.3 66.	7 55.1 44.9
Central	93.6	6.4	65.0	35.0	9.7	90.3	55.5	44.5	46.3 69	7 53.6 46.4
Total	91.8	8.2	67.2	32.8	16.9	83.1	553	44.7	40.0 60.	0 53.8 46.2

Table 3: Cross tabulation between region of residence and attitude towards HIV-positive persons

Legend: A=Belief that HIV/AIDS is real; B=Befriending HIV/AIDS-infected person; C=Marrying HIV/AIDS-infected person; D=Separating with HIV/AIDS friend for becoming infected; E=Separating with HIV/AIDS sexmate for becoming infected; F= Separating with HIV/AIDS-infected person for becoming infected.

The chi-square distribution results between region and separation of friendship indicated a 6.94 minimum expected count and significance value 0.473. Thus there was no significant difference between a student's attitude to separate with an HIV positive friend and the region where he/she comes from.

Another cross-tabulation analysis between Region and separation of sex-mate of HIV positive status showed the maximum percentage of positive attitude (64.3 percent) from Upper Region and a minimum of 29.4 percent from Ashanti Region (table 3). The chi-square analysis gave the minimum expected count of 6.26 and significant value of 0.454. This means that the proportion of students with positive attitude is not significantly different from the proportions from the various regions. This means that it does not matter regions students came from their proportions of responses were not significantly different.

When students were asked if they would separate with spouses if found HIV positive majority (80 percent) from Upper West Region, had positive attitude. The lowest positive attitude was in Central Region, 46.6 percent (table 3). Zero percent of cells had expected count less than 5 and significance value 0.01. The proportions of the two variables are therefore significantly different. This implies that the attitude of Polytechnic students is significantly different from the regions they came from. Thus the attitude of separating from a spouse, assuming one has a spouse, with HIV positive status, is significantly different from the region of the student.

### 4.4.4 Settlement type versus attitudes

Table 4 shows the cross-tabulation results on residential settlement and the attitude of respondents towards HIV infected persons. Students, living in urban areas showed most positive attitude (68.3 percent) while the periurban settlers showed the least (64.2 percent). Chi-square analysis gave the minimum expected count of 26.64 and significance value 0.799. This implies that the proportion of type of settlement is not significantly different from the proportion of choosing HIV positive persons as friends. Thus there is no significant difference in where a person resides and whether he/she would choose HIV infected person as a friend or not.

		А	ł	3	С		Ι	)	Е		F
Settlement	Yes	No	Yes	No	Yes	No	Yes	No	Yes No	Yes	s No
Urban	94.0	6.0	68.3	31.7	13.0	87.0	56.3	43.7	37.7 62.3	54.0	46.0
Peri urban	90.1	9.9	64.2	35.8	18.5	81.5	56.9	43.1	35.2 64.8	55.6	44.4
Rural	89.1	10.9	66.9	33.1	23.2	76.8	51.1	48.9	44.4 55.6	50.7	49.3
Total	91.8	8.2	67.1	32.9	17.1	82.9	54.8	45.2	39.4 60.6	53.3	46.7

Table 4: Cross tabulation between type of settlement and attitudes of students

Legend: A=Belief that HIV/AIDS is real; B=Befriending HIV/AIDS-infected person; C=Marrying HIV/AIDS-infected person; D=Separating with HIV/AIDS friend for becoming infected; E=Separating with HIV/AIDS sexmate for becoming infected; F= Separating with HIV/AIDS-infected person for becoming infected.

The study also showed that 94 percent (maximum) of residents in urban areas believe that HIV is real (table 4). Those who reside in rural areas scored 89.1percent (minimum). Chi-square analysis yielded a minimum expected count of 6.62 and significance value 0.207. This means that there is a significant difference between the type of residents of respondents and the belief in the reality of the existence of HIV/AIDS. Thus majority of the students had positive attitude to the reality of the pandemic.

The attitude of respondents was negative on whether they would marry HIV-positive person. From table 4, 87 percent, 81.5 percent and 76.8 percent of urban, peri-urban and rural settlers respectively would not marry an HIV-infected person. With zero percent of cells having expected count less than 5 and the significance value 0.041 it could be deduced that there is a significant difference between where a student lives and his/her decision to marry an HIV-positive person.

In terms of the relationship between type of residence and separation of friendship the chi-square results yielded 0.585 with asymptotic significance of 37.82. This implies that there was no significant difference between the attitudes of separating with HIV-infected friend and where a student is settled. Thus whether a student will separate with an HIV/AIDS friend does not depend on whether he/she resides in an urban, peri-urban or rural area.

The study revealed an unfavourable attitude of students on the question of separating with sex-mate when found he/she is HIV positive. From table 4, the worst was the peri-urban settlers (56.9 percent) and the least, rural settlers (51.1 percent). In analyzing the results, there were zero percent cells having expected count less than 5 with significance value 0.588. It could therefore be deduced that there was no significant difference between where a person resides and his/her decision to separate with a sex-mate when found he/she is HIV person.

The attitude of students as to whether they would separate with a spouse when found HIV-positive was favorable (refer table 4). The chi-square analysis gave zero percent expected count less than 5 and significance value 0.339. This shows that where a person lives is not a significant factor as his/her decision to separate with a spouse when detected to be HIV-positive. About 62 percent urban dwellers, 64.8 percent peri-urban dwellers and 55.6 percent rural dwellers (table 4) would separate with their spouses when detected with the HIV virus.

## 4.4.5 Programme, school and marital status versus attitudes

From the study it was found that the relationship between level of programme and separation of friendship between HIV-infected friends gave a minimum expected count of 63.48 and significance value 0.191. This implies that the difference between students' desire to separate with HIV positive friend is not significantly different in terms of level of programme in the institution.

The study also showed that chi-square results between marital status and desire to separate with HIV positive friend yielded no significant difference. The minimum expected count was 54.54 and asymptotic significance of 0.25. Thus whether or not a student will separate with a friend when found HIV positive does not matter whether the student is married, single or in a relationship.

Analyzing the school/faculty a student belongs to and the desire to separate with an HIV infected friend, the chisquare results yielded an asymptotic significance of 0.359 and a minimum expected count of 31.88. This means that the school/faculty a student belongs to does not significantly influence his attitude to separate with an HIV infected friend. Thus Chi-square analysis between department of students, school in the institution and marital status on one hand and each attitude of students on the other did not yield any association.

# 5. Conclusion

Based on the findings of the study the following conclusions are drawn:

- There is a high degree of awareness among polytechnic students about HIV/AIDS though about 8.2 percent does not believe that HIV/AIDS is real.
- There is a positive attitude of students towards PLWHA in terms of choosing one as a platonic friend. About 33 would not
- There is an unfavorable attitude of students towards PLWHA when it came to choosing one as a spouse. However 32.7 percent would do so.
- The general response of students towards PLWHA in terms of choosing one as a sex-mate is positive though 44.6 would not separate.
- Students' response is negative when given the opportunity to separate with PLWHA as spouse when found. About 40 percent would not do so.
- There is a positive attitude of students when it came to separating with PLWHA as sex-mate when detected. Majority will not separate with partners.
- Stigma and discrimination among students towards PLWHA exist.

- Geographic region and type of settlement could affect the attitude of students towards PLWHA among polytechnic students in Ghana. The association of age, marital status, department and school in relation to students' attitude towards PLWHA could not be established.
- About 32 percent of students who would not befriend PLWHA were not aware that platonic friendship is not a way of transmission.

## 6. Recommendations

HIV/AIDS is regarded by most Ghanaians as a consequence of sexual immorality. For this reason those who contract the disease and become positive to the virus are viewed with contempt. It is seen as an irresponsible act in becoming HIV/AIDS infected person. People who contract HIV/AIDS are considered promiscuous and therefore become a disgrace to the entire family. These attitudes have cultural connotations. Family members are collectively seen as responsible and viewed with scorn when a member of a family becomes infected with the virus. The family system is made up of a chain of members who are interconnected and intertwined with equal measure of values and norms. It is therefore inseparable to claim irresponsibility when a family member becomes infected with the HIV/AIDS virus. It therefore requires cultural methods to diffuse the mentality through intensive and widespread education. It appears for this reason, that the wisest thing to do is to make sure that one does not become infected by distancing oneself from a PLWHA in order to reduce the probability of becoming infected to the barest minimum. These attitudes however bring about stigmatization and discriminating against PLWHA (Woode & Ahorlu, 2005; Achio, 2007).

HIV/AIDS awareness programmes should focus on using workshops (Woode & Ahorlu, 2005), print and the electronic media. Using PLWHA in campaigns to create awareness could have a more positive effect. Similar strategies should be used to create awareness for both male and female. In terms of geographic region and type of settlement, different awareness strategies should be adopted.

Education should also be intensified using workshops (Woode & Ahorlu, 2005), print and the electronic media to dissuade students from stigmatizing and discriminating against PLWHA; nurturing the institutional culture to be dynamic by advertizing, using student ID cards, congregation brochures and students handbooks to create awareness on stigmatization of PLWHA could play a major role to change students' attitudes; various institutional ceremonies such as orientation and matriculation of new students could be used as important platforms. Speeches, talks, seminars and conferences can also play a major role in this regard (Achio, 2007).

Various students' associations should be encouraged to include HIV/AIDS existence and stigmatization programmes in their annual week-celebrations. Funds should be budgeted for by the associations as a deliberate attempt by the entire administrative authority and the student body as a whole through the Students Representative Council to create greater awareness. Sponsorship could be sought by these associations for such programmes. Involving experts, resource persons and adepts to present speeches and talks during such programmes could have a significant effect in the education process. An institutional policy on awareness of the existence of HIV/AIDS and stigmatization of PLWHA to make polytechnic students' associations organically and intrinsically part of the education process could generate the desired results. Education focusing on condom usage and more on abstinence and its numerous benefits, even for married couples, in the prevention of viral transmission between sexual partners could help eliminate the HIV/AIDS scourge.

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