ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Behavioral Change and Responses to HIV/AIDS Messages in Some Selected Private College Students of Addis Ababa

A Thesis Submitted to the School of Graduate Studies of Addis Ababa University in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Counseling Psychology

By

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Approved by Board of Examiners

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List of Tables

Acronyms

AAU	Addis Ababa University
ABC	Abstinence, Being faithful, Condom use
AIDS	Acquired Immuno Deficiency Syndrome
BSS	Behavioral Surveillance Survey
CSA	Central Statistical Authority
CSW	Commercial Sex Workers
DHS	Demographic Health Survey
EPPM	Extended Parallel Process Model
HIV	Human-Immuno-deficiency Virus
IEC	Information, Education, and Communication
KAPB	Knowledge, Attitude, Behavior, and Practice
PLWHA	Persons/People Living With HIV/AIDS
MOH	Ministry of Health
RH	Reproductive Health
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UN	United Nations
UNAIDS	United States Agency for International Development

Abstract

The extent of damage caused by HIV/AIDS, particularly, in developing countries calls for every one's contribution towards its prevention. The danger is more serious imagining adolescents and adults as primary victims of the disease. Hence, this study is done to identify the level of HIV/AIDS related issues such as knowledge, behavioral change, risk perception, appraisal of recommended responses among private college students of Add is Ababa, where the most vulnerable age group could be found. Associations of behavioral change with the others are also determined.

230 subjects were randomly selected from two of the private colleges found in Addis Ababa. And data was obtained from the subjects using self administered questionnaire and descriptive analysis of it was done. Correlation analysis was also made to see the association between behavioral changes with the factors mentioned above.

Knowledge about HIV/AIDS was found to be high among the participants. Although, the overall behavior/practice was safe by majority, unsafe sexual behaviors were also observed from the results. Subjects' risk perception was found to be in a good position. The same is true for appraisal of recommended responses. Positive correlation was obtained between behavioral change and the rest factors suggesting their contribution to behavioral change.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Experience has revealed many sudden appearances of strange diseases in different parts of the world. Sars in China, Ebola in Uganda can be cases in point, killing so many productive individuals. Fortunately, scholars seem to manage further devastations that could have been assumed if the diseases were to remain for longer period of time and spread all over the world. This is not the case when it comes to AIDS that remained beyond control killing people for years.

It is hard to imagine the damage imposed by AIDS since its emergence on earth. According to the estimation for the end of 2003, approximately 40 million people are estimated to live with HIV/AIDS (UN, 2003). And the epidemic strike hard, predominantly, the less developed world that continued to record the greatest number of HIV infection and deaths. Regional statistics indicates that the number of people living with the virus in Sub-Saharan Africa by the end of 2003 was about 28.2 million, according to 70 percent of the total HIV infection (UN, 2003).

Ethiopia, one of the Sub-Saharan countries, suffered a lot from the consequences of AIDS. Since 1984, during which the first evidence of HIV infection was found till 2003, 1.5 million people were infected with the virus (MOH: 2004). Previous report stated the problem being more widespread in urban than rural areas, with a prevalence rate of 13.7 percent as compared with 3.7 percent for the later (MOH, 2003). HIV prevalence for Addis Ababa was estimated to be 15.6 percent. Adolescence and early adults were the most affected groups from the total population for which the focus of this study in relation to HIV/AIDS is primarily targeting.

1.2. Statement of the Problem

Studies conduced in different parts of Ethiopia at different times revealed that there is evidence of increased knowledge about HIV/AIDS. This is the result of efforts made to prevent the spread of HIV through awareness creation in public (Amsale (2002); (UN, (2003); (Pro-Pride(1998)).

However, it is observed that despite good knowledge about the disease people manifested risky behavior that could expose them to HIV virus (Emmanuel and Hisako (2002); Africa AIDS Initiative (2006); Shiferaw (2004)).

Under such condition, the EPPM model provides additional crucial factors that contribute in resulting effective behavioral change. These factors are related with the message passed to the public about the health problem. One of these factors is whether the message about a health threat sticks in the minds of an individual a sense of being at risk of the problem. This increases the risk perception related to the disease.

Once, the individual feels the possibility of vulnerability to the disease, he/she will be motivated to take action in order to protect him/herself form the disease. Consequently, upon responding to the emerging threat, recommended responses in reaction to the threat should get acceptance in the part of the individuals (Witte, 1992).

In this study, an effort was made to investigate the level of knowledge, behavioral change, risk perception, and appraisal of recommended responses regarding HIV/AIDS among private college students in Addis Ababa. The study is restricted to only private colleges because of the financial and time constraints that could have been encountered if government institutions were to be included. In addition, as the researcher has close contact with private institutions, it is convenient for natural observation of subjects of the study.

An attempt was also made to see the association between these important variables with the assumption that behavioral change would relate to knowledge, risk perception, and appraisal of recommended responses.

Accordingly, answering the following questions was central to this study:

- What is the level of knowledge among students?
- What is the existing behavior/practice of students to HIV/AIDS?
- What is the level of risk perception about HIV/AIDS among students?
- What is the attitude towards recommended responses in reaction to HIV/AIDS.
- How does behavioral change/practice regarding HIV/AIDS relate with knowledge, risk perception, appraisal of recommended responses?

1.3. Objective of the Study

This study was primarily made based on EPPM which claims the importance of two types of appraisals relevant to behavioral change in response to a disease. That is, the perception of oneself to be possible victim (appraisal of threat or risk perception) because of which he/she becomes motivated to take actions that is considered as efficient (efficacy of recommended responses). These factors operate even provided the person's knowledge about the disease. Accordingly, the major objectives of this study are:

A. Assessing the level of knowledge about HIV/AIDS.
B. Identifying the level of manifestation of safe behavior in relation to HIV/AIDS.
C. Identifying the level of risk perception concerning HIV/AIDS.

D. Assessing the extent of appraisal of recommended responses for the prevention of HIV/AIDS.

E. Identifying the relation between manifestation of safe behavior and knowledge, risk perception, appraisal of recommended responses.

1.4. Significance of the study

According to the Ministry of Health (2002), the highest HIV infection rates are concentrated among the age group 15 to 24 years and to slightly lesser extent among age group 25 to 34 years. And, in terms of absolute numbers, the highest concentrations of HIV infected persons are found in the age group 20 to 24 years and 25 to 29 years, particularly in the case of females. The highest concentrations of infected males are found in both age groups 20 to 24 years and 25 to 29 years. The HIV prevalence rates as well as the number of infected persons seem to decline with age.

Evidently, the disease is a big threat to the society because it is primarily challenging the most productive portion of the population or those who are going to be in the very near future. In line with this, the fight against the disease should give due attention to these age groups to have a remarkable change.

One way to have access to this target groups would be in private college. Thus, dealing the issue of HIV/AIDS in the case of private colleges in a venue for addressing the most vulnerable age cohort from the society.

Studies like this that identify the type of relationship various factors have with behavioral change are expected to serve in directing efforts towards relevant dimensions bringing about behavioral change.

1.5. Delimitation of the Study

The study considered two of the private colleges from Addis Ababa and 230 subjects. The study is limited to this number of institutions and samples for different resource constraints. Furthermore, behavioral changes other than the existing extent of knowledge, risk perception, appraisal of recommended responses were not treated in this study.

1.6. Operational Definitions

In this particular study, the following terms are referred as the corresponding definitions provided here under.

I. **Behavior/practice-** refers to the adoption of behaviors that reduces or eliminates the chance of being infected with HIV. It is mainly inferred from one sexual behaviors and manner of using sharp objects.

II. **Knowledge-** in this study primarily refers to one's recognition of HIV transmission and prevention mechanisms, and method of identifying peoples HIV status. The presence of knowledge is countermined when an individual correctly answers at least three of the transmission and prevention mechanisms.

III. **Risk Perception-** implies one's feeling of being at risk of HIV infection. Its existence is inferred from the level of manifestation of uncomfortable feeling when exposed to situations having high chance of infection.

IV. **Appraisal of Recommended Responses-** means one's appreciation of suggested HIV prevention mechanisms. It is implied from reactions to messages that advocates for those suggestions.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Several studies had been made to understand and overcome the problems imposed by HIV/AIDS on the human race. Few of such studies that relate to the issues raised in this study are presented here under.

2.1. Trends of HIV/AIDS

More than two decades after the HIV/AIDS epidemic took root; Africa continued to record the greatest number of HIV infections and deaths. According to UNAIDS (2002), approximately 70 percent of the world's 40 million HIV positive population lives in Sub-Saharan Africa. UNAIDS also reported that out of the 5 million newly infected persons in 2001, 3.5 million of them live in Sub-Saharan Africa. Of the 2.8 million who died of AIDS in 1999, 2.2 million or 85 percent of them were in Africa. In spite of this alarming statistic, the HIV/AIDS epidemic on the African continent is still spreading rapidly. Although the governments in Africa are searching ways of dealing with the HIV/AIDS epidemic, political leaders in many countries have failed to demonstrate the leadership needed to raise AIDS awareness among their people (source....).

Heterosexual relationships became one of the major means in the spread of AIDS amidst the decline in its transmission from blood and blood products (Taylor, 1990). Individual behavioral change, particularly sexual behavioral change, appears to be the most effective means to prevent further AIDS/HIV spread under the current circumstance in Africa (Emmanuel and Hisako, 2002).

Ethiopia is one of the most seriously affected countries among the Sub-Saharan countries. The earliest evidence of HIV infection in Ethiopia was found in 1984, with the first case

reported in 1986. Since 1984, a total of 107,575 AIDS cases were reported to the Ministry of Health. The prevalence of HIV was low in 1980s but increased rapidly in the 1990s. By the year 2001 3.8 million people are estimated as persons living with HIV/AIDS in our country. (MOH: 2002).

In relation to sex and age, the highest prevalence of HIV is seen in the group 15 to 24 years of age, representing "recent infections". The age and sex distribution of reported AIDS cases shows that about 91 percent of infections occur among adults between 15 and 49 years. Given that, the age range encompasses the most economically productive segment of the population, the epidemic impacts negatively on labor productivity. Work time is lost through frequent absenteeism, and decreased capacity to do normal work as the disease advances. There are also social consequences of the epidemic as care givers and income generating members of the family die leaving behind orphans and other dependents. These events lead to an aggravation of the problem of poverty and social instability. The data also show that the number of females infected between 15 and 19 years is much higher than the number of males in the same age group. This discrepancy is attributable to earlier sexual activity among young females with older male partners (MOH: 2002).

The major avenue of transmission of HIV infection in Ethiopia is heterosexual intercourse and the practice of multiple sexual partnerships, particularly in urban areas. Illegal medical practices and harmful traditional practices are also potential routes of transmission. It is believed that 30 to 40 percent of babies born to HIV positive mothers are likely to contract the virus (MOH: 2002).

2.2. **Knowledge about HIV/AIDS**

So far, the best reaction to mitigate the sever impact of HIV/AIDS is found to be preventing the transmission of the virus. This in turn called for the task of making the public well informed about the disease. Accordingly, various government and non-government organizations are working on the fight against the pandemic, especially on the areas of awareness creation as well as about the modes of transmission to enable individuals to protect themselves from contracting the infection (Teshager & Yehualashet (2004)). Shiferaw, 2004 also pointed out the focus of Information Education Communication (IEC) campaigns to have been on knowledge diffusion, and were mostly a success because, the majority of Ethiopian population knows about HIV/AIDS and its major means of transmission and at least one method of prevention.

The acquisition of detailed aspects of knowledge about an issue naturally comes following awareness of the matter, which refers to the universal information such as the mere existence of such an issue.

Awareness of and knowledge to avoid HIV/AIDS may be enhanced by exposure to individuals who have HIV virus or have died from AIDS. In this respect, UNAIDS report on the status of HIV/AIDS showed about one in four women and one in three men in Ethiopia acknowledging that they know someone who has HIVAIDS or someone who has died from AIDS (CSA, 2001).

However, being aware of HIV/AIDS does not imply having sufficient knowledge, which indicates people's better understanding about the disease such as facts about the virus and epidemiological aspects of it (Concern-Ethiopia, 2002).

2.2.1. Knowledge about HIV Transmission

Knowledge of the correct ways of HIV transmission is paramount for individuals to protect themselves from contracting the infection and to reduce the prevailing stigmatizing attitudes towards persons living with the virus.

Several studies indicated heterosexual relationships as one of the major means to spread HIV. For example, Fumento (1993) forwarded the major mode if HIV transmission in Africa to be through heterosexual contacts which accounted 90 percent of the infection. According to MOH (1998), this same cause was reported for 87 percent of HIV transmission in Ethiopia.

Upon an attempt to know respondents' knowledge of HIV transmission in selected towns of Oromiya region, 87 percent of the female and 97 percent of the male spontaneously mentioned multiple sexual partnerships as one of the modes of transmission of the virus (Teshager & Yehualashet, 2004).

The other most commonly recognized mode of transmission was the use of contaminated medical devices, such as , needle and other skin piercing materials (Teshager &Yehaulashet, 2004).

Like some other sexually transmitted disease, HIV can also be transmitted through blood and during pregnancy (Berer, 1993 as cited by Asnake, 2001, 2001). Fontanet and Tilahun (1999) as mentioned by Asnake (2001) observed that modes of transmission other than heterosexual and mother to child did not play any important epidemiological role in HIV transmission.

A sizable percentage of women and men mentioned sharing razors/blades as possible way of transmission in CSA (2001)report on HIV/AIDS and other STIs in Ethiopia.

Sexually Transmitted Infections (STIs) are important predisposing factor of HIV/AIDS transmission. Hence, the presence of STIs in a population increases the likelihood of the occurrence of HIV. Concerning this, thirty-seven percent of women and nineteen percent of men in Ethiopia have no knowledge of STIs (CSA, 2001).

2.2.2. Knowledge about HIV Prevention

In addition to the knowledge of modes of HIV transmission, it is equally important that individuals know the means of protection to avoid getting the infection. Prevention skill entails the capability of the persons to translate the knowledge of modes of various transmission into knowledge of means of prevention as well as consistent application of these means in the daily routine.

Programmatically important ways to avoid the spread of HIV/AIDS are abstaining from sex, using condom, and limiting the number of sexual partners (CSA, 2001). Asnake, (2001) also mentioned different authors suggesting abstinence, consistence use of condom, and faithfulness to sexual partner as intervention strategies.

Regarding this Teshger & Yehualashet (2004) found that the most common means of protection spontaneously mentioned in the selected towns of Oromiya region was remaining faithful to just only one partner. The other common means recognized was abstinence. Male respondents were more likely to mentioned abstinence than female.

A study conducted on A.A.U students showed 32 percent of the respondents were able to tell the mode of preventing the transmission of HIV/AIDS. Consistent use of condom, faithfulness to one's sexual partner (spouse) was mentioned as ways to avoid contracting the AIDS virus (Africa AIDS initiative, 2006).

In general, the level of knowledge regarding AIDS is indicated to be high in different parts of the world. Knowledge, belief, practice survey carried out in Tanzania identified

that 97 percent of the respondents were aware of AIDS and over 80 percent of knew the major routes of transmission. In addition, study from Zaire showed 99 percent of men and 96 percent have knowledge about HIV/AIDS. 95.2 percent of Nigerian adolescents were aware of AIDS (Amsale, 2002).

The same is true in Ethiopia according to the outline in Demographic Health Survey (DSH: 2000) which reported knowledge of HIV/AIDS to be very high among Ethiopians, with women somewhat less likely to have heard of the infection than men which is 85 percent and 96 percent, respectively (CSA, 2001).

Additionally, studies conducted in different parts of Ethiopia at different times revealed that there is evidence of increased knowledge about AIDS. For example, KAPB Survey Result on HIV/AIDS/STD among male and female community members in Woreda 5 od Addis Ababa found out 99 percent of male and 98 percent of females responding correctly on the ways of HIV transmission (Pro-Pride (1998)). Shiferaw (2002) in its study of Perceived Sufficiency and Usefulness of IEC Materials and Methods on HIV/AIDS among High School Youth in Addis Ababa reported subjects' response of sexual intercourse to be the main mode of HIV transmission.

Studies on high school and college age population had indicated that respondents were relatively knowledgeable about AIDS (Crooks and Baur, 1990). Tilahun (1997) found similar results in that AIDS related knowledge among Gonder Medical College students was generally high.

2.3. Behavior/Practice in Relation to HIV/AIDS

Until now, the absence of cure to HIV/AIDS has forced everybody to rely on the preventive techniques. These in turn required understanding the behaviors that put individuals at risk of HIV infection, and identifying ways to change these behaviors. In

Africa, where the primary route of transmission is heterosexual, there is widespread agreement that the most important goal of behavioral change programs should be to reduce unprotected sexual contact (Pokolo and Kathleen, 2002).

There are two models advocating for different target population for behavioral change: The Epidemiological model and The Holistic or General Population Model (Pokolo and Kathleen, 2002).

The holistic or general population model targets the entire community or society. The WHO's primary health care framework, that includes this holistic approach, emphasizes behavioral change interventions for the entire community with maximum community and multi-sectoral collaboration. It is argued that holistic, community-wide prevention programs provide more equitable access to prevention services and are thus more likely to gain political and popular support (Pokolo and Kathleen, 2002).

The epidemiologic model targets those populations with the highest risk of transmitting HIV. These included commercial sex workers and their clients, migrant workers, and persons who already have another Sexually Transmitted Disease (STD). vulnerable populations such as adolescents and women are included as high-risk groups in an extension of epidemiologic model. Young people are an especially important group in nearly all African countries, because HIV infection usually occurs during adolescence and young adulthood (Pokolo and Kathleen, 2002).

2.3.1. Sexual Practice

It is widely believed that sexual behavior people to be the major cause for HIV transmission. For example, Emmanuel and Hisako (2002) reminded individual behavioral change, particularly sexual behavioral change, to be the most effective means to prevent further HIV/AIDS spread under the current circumstance in Africa.

Similarly, CSA (2001) report indicated the promotion of safe sex, including encouraging monogamous relationships, discouraging multiple sexual partners, and promoting the use of condom, as an important component of AIDS prevention programs. Its study in Ethiopia showed majority of currently married women and men practicing sex only with their spouse in the last six months preceding the survey. The data also showed that men having more sexual partners than women (7 percent and 1 percent, respectively). From the married group, 12 percent of 17 percent of men have had sexual intercourse with one partner in the last 12 months before the survey and 1 percent of women and 5 percent of men have had sexual intercourse with more than one partner during the same period.

A study conducted by Africa AIDS Initiative (2006) on Addis Ababa University students found 20 percent of the total respondents and 57 percent of the sexually active group to be sexually active in the past 12 months. The partners with whom these sexually active group was making sex were spouse, regular partners, non regular partners, commercial sex workers, and incidental partners.

2.3.2. Social Aspects

Individual's socially important practices to prevent and mitigate HIV/AIDS were also considered in CSA (2001) study as constructive behavior. These practices are related to attitude toward people with the AIDS virus, and the habit of discussion about HIV/AIDS with spouse or partner.

In conducting Demographic Health Survey in Ethiopia it was tried to identify the extent of stigmas associated with HIV/AIDS and discrimination against people who have HIV/AIDS. Consequently, respondents were asked for their opinion on whether a person who knows she/he has the AIDS virus should be allowed to keep this information a secret or should make it available to the community. And it was found that nearly twice as

many women as men who have heard of AIDS believed that a person who knows that she/he has the AIDS virus should be allowed to keep this information a secret. Moreover, upon responding for willingness to care for relatives who are infected with the virus, about one in two women and men who have heard about AIDS were found to be willing. Regarding habit of discussion, one in four women and one in two men currently married or living with a partner has discussed the prevention of HIV/AIDS with their spouse or partner CSA (2001).

Widespread stigma and discrimination against PLWHA are being prevalent among students of Addis Ababa University. This is manifested by resisting sharing meal with and providing care and support for persons infected by the AIDS virus (Africa AIDS Initiative (2006)).

Concerning the habit of discussion on sexual matters, it usually took place between and/or among male students and rarely among female students of Addis Ababa University students. However, both female and male students occasionally exchanged ideas on effective HIV/STD prevention measures and whether condom should be used consistently in all sexual encounters (Africa AIDS Initiative, 2006).

2.4. Knowledge and Behavior/Practice Related to HIV/AIDS

In the above section the important knowledge areas and practices in relation to HIV/AIDS was briefly discussed. Dissemination of knowledge about HIV/AIDS was hoped to result in the desired practice in the prevention process. However it was found out that despite good knowledge about the disease people manifested risky behaviors.

In this regard, Emmanuel and Matsuo (2002) called for number of studies showing high engagement in unsafe sexual behaviors such as high number of partners, sex with

unknown persons, as well as less than positive view about condom use, and low rate of behavior change even after learning about AIDS. Furthermore, Serovich and Greene (1997) found that more than 40 percent of participants were engaging in risky sexual behavior suggesting a moderate to high knowledge level of AIDS may not be a predictor of safe sexual behavior practices.

Researches conducted in Ethiopia have also indicated that though knowledge is important, it has not been found to be strongly related to behavioral change and the adoption of safer sex practice. For instance, Shiferaw (2002) pinpointed that many students fail to use knowledge as a bases for guiding their behavior. Shiferaw (2004) added the high awareness and knowledge not leading to lowering the risk behavior based on the fact that significant proportion of respondent's report which showed that they did not always use condom with non-regular partners; though they knew that condom use protects from HIV infection.

A study conducted by Tilahun (1997) as cited by Asnke (2001) indicated that AIDS related knowledge was generally adequate among Gonder Medical College students, but their sexual behavior was not consistent with that of their knowledge. It is observed that among the sexually active students of Gonder Medical College, almost all know that using condom is one strategy for minimizing the risk of contracting HIV, but only a third of the students reported using them.

Moreover, most studies show that college students are responsible and well informed about AIDS but are reluctant to change their sexual behavior unless threat of infection is personalized. Subsequently, students' attitude towards the disease and their protective behavior did not match with the relatively high knowledge they have (Beyene; et al., (1997) as cited by Asnake (2001)).

Additionally, participants of Africa AIDS Initiative (2006) study, reported there is little behavioral change among Addis Ababa University students despite their knowledge on the mode of transmission of the AIDS virus.

Therefore, under such circumstances, it is natural to look for additional factors operating behind the scene. Here, the extended Parallel Process Model (EPPM) forwards two important cognitive dimensions resulting from health risk messages that could be responsible for changes in behavior regarding a particular disease. There are an appraisal of threat and appraisal of efficacy of recommended responses. Subsequently, according to this model, an individual should consider himself/herself as susceptible to the disease (appraisal of threat) and hence upon responding, recommended responses should be appealing to him/her (appraisal of efficacy of recommended responses).

2.5 Extended Parallel Process Model (EPPM)

Extended Parallel Process Model is a health risk message theory, which forwards two important cognitive dimensions resulting from health risk messages that could be responsible for changes in behavior regarding a particular disease. There is an appraisal of threat and an appraisal of effectiveness of recommended responses. Thus according to the model, public-health messages must include both a threat and a way to lessen the threat if effective behavioral change is required in relation to the disease (Phil Williams: 2000).

2.5.1 Threat

Threat is an external stimulus variable (example, an environmental or message cue) that exists whether a person knows it or not. If an individual holds a cognition that a threat exists, then he or she is *perceiving* a threat. Message characterization of threat focus on the severity of the threat (example, "AIDS leads to death") and on the targeted

population's susceptibility to the threat (example, "You are at risk of AIDS because you share needles while using intravenous drugs"). Correspondingly, *perceived severity* is an individual's belief about the seriousness of the threat, while *perceived susceptibility* is an individual's beliefs about the seriousness of the threat, while *perceived susceptibility* is an individual's beliefs about his or her chances of experiencing the threat (Witte, 1992).

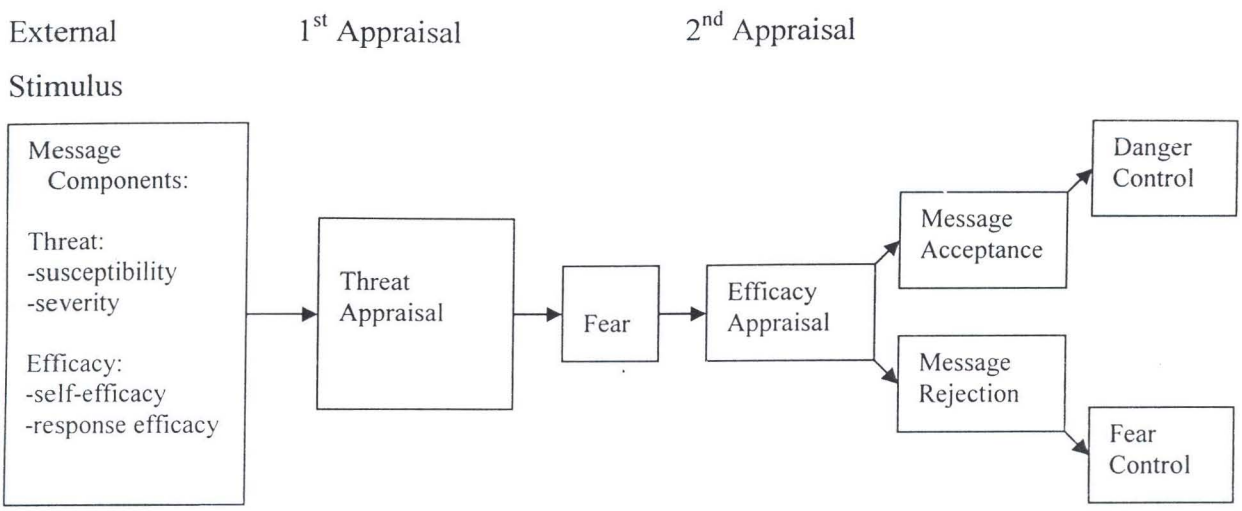
2.5.2 Efficacy

Efficacy also exists as an environmental or message cue and may lead to *perceived efficacy*, which refers to cognitions about efficacy. Message depictions of efficacy focus on the effectiveness of the recommended response (i.e., *response efficacy*).

Correspondingly, perceived response efficacy refers to an individual's belief as to whether a response effectively prevents the threat (example, "I believe condoms prevent HIV contraction"), and *perceived self-efficacy* refers to an individual's belief in his or her ability to perform the recommended response (example, "I think that I can easily use condoms to prevent HIV contraction") (Witte, 1992).

2.5.3 Outcome Variables

The typical outcome in fear appeal research is *message acceptance,* defined in behavior change. Other outcomes less commonly assessed but equally important are defensive avoidance and reactance. *Defensive avoidance* is a motivated resistance to the message, such as denial or minimization of the threat. *Reactance* occurs when perceived freedom is reduced and an individual believes "that the communicator is trying to make him/her change" (example " I will show them that they can't manipulate me, I am going to smoke more!"). The following figure illustrates how the two cognitive appraisals resulting from health risk message leads to danger control or fear control reactions (Witte, 1992).



As an overview, considering what happens when a person is presented with a fear appeal message about HIV/AIDS depicting the components of threat (i.e., severity and susceptibility), and the components of efficacy (i.e., response efficacy and self efficacy). A fear appeal initiates two appraisals in the cognitive encoder (i.e., individual). First, persons appraise the perceived threat of HIV/AIDS. If the appraisal of threat results in moderate to high to high-perceived threat, then fear is elicited and people are motivated to begin the second appraisal, which is an evaluation of the efficacy of the recommended response in reaction to HIV/AIDS. When the threat is perceived as low (i.e., trivial or irrelevant), there is no motivation to process the message further, efficacy is not evaluated and there is no motivation to process the message further; efficacy is not evaluated and there is no response to the fear appeal (Witte (1992)).

When both perceived threat and perceived efficacy are high, danger control; processes are initiated. That is when people consider HIV/AIDS is deadly and they are susceptible to it; they are motivated to control the danger (protection motivation) by thinking of strategies to avert the threat (adaptive outcomes). When danger control processes are dominating, *individuals respond to the danger, not to their fear*. Conversely, when

perceived threat is high, but perceived efficacy is low, fear control processes are initiated. Thus, they become motivated to cope with their fear (defensive motivation) by engaging in maladaptive responses (example, denial) (Witte, 1992).

2.6. Risk Perception

Risk perception refers to the individual's perception of being at risk of HIV/AIDS. This can be determined from the individuals control over risk factors (Denny and Quadgno, 1992).

2.6.1. Risk Factors

Studies had been conducted to identify factors inducing risky behaviors that could expose to HIV/AIDS, unwanted pregnancy and STI among Addis Ababa University students. It was reported addiction to various types of drugs such as chat, shisha and alcohol as major risk factors that expose students to the stated dangers. From respondents of Addis Ababa University participating in the study, 25.9 percent had the habit of drinking alcohol and 36.7 percent used drugs (Africa AIDS Initiative (2006)).

In the same study mentioned above, it was indicated that the behavior of using drugs, drinking alcohol and making sex to be manifested as complementing each other. For instance, 31.7 percent of respondents who were chewing chat either drunk alcohol or had sex. And from students addicted to shisha, hashish and injectable drugs 82.8 percent, 85.6 percent and 57.2 percent of them drunk alcohol and were sexually active. This implies those who have the habit of drinking alcohol and/or using drugs like chat to be at a higher risk of being infected the AIDS virus.

The other factor that initiates students to involve in dangerous and risky behavior was peer pressure. College students were often viewed as being at high risk for HIV infection due to their propensity to engage in exploratory behavior and their need for peer social

approval (Denny and Quadgno, 1992). These was observed among Addis Ababa University students in that there is the acts of peers to attract or influence the young or the young themselves join the group using chat and alcohol for fear of being labeled as "uncivilized" (Africa AIDS Initiative, 2006).

2.6.2. Feeling of Self at Risk

In addition to knowledge and attitude about AIDS, previous literatures on health behaviors has focused on the role of individuals' perceived susceptibility to AIDS as a motivator of behavioral change (Aiken; et al., 2001; Fishbein; et al., 2001).

Research focusing on the effect of beliefs of susceptibility to AIDS indicates that adolescents and adults who had reported high perceived risk for AIDS practice safer sexual behaviors, whereas those who perceive low risk of contracting AIDS report practicing unsafe sexual behaviors (Gray & Saracino, 1989; Villarruel et al., 1998).

Concerning this, survey of undergraduate students at Oregon University discovered that most students, while reasonably well informed about AIDS did not feel at risk for the disease, and were not inclined to communicate with one another about risk of AIDS prior to sexual activity with new partner, and frequently engage in sex without using condom (Crooks and Baur, 1990).

In Ethiopia, study from Pro-Pride (1998) reported majority (85.8 percent) of the respondents of Woreda 5 Community Members of Addis Ababa considering themselves as they had no chance of being infected by HIV.

College students in north west Ethiopia were found to score low mean result on items measuring perception level of threat because of HIV/AIDS. The belief of threat was lower for females compared to males (Shiferaw, 2004). Africa AIDS Initiative (2006) reported some of Addis Ababa University students to be indifferent to the risk of

contracting HIV virus. Even those who are fully aware of the consequence of having unsafe sex do not feel comfortable to use condoms. Most females believe that male students as more risk takers than their female counter parts regarding behaviors that could expose to HIV/AIDS.

2.7. Recommended Responses in Reaction to HIV/AIDS

To tackle the spread of HIV, the commonly advocated responses are abstinence of sex before marriage, to be faithful to one partner and the use of condom during sex (CSA, 2001; Asnake, 2001).

Abstinence refers to the decision to avoid sexual intercourse. There are differences on the idea of promoting this measure, because despite its high reliability in preventing sexually related infections, there is doubt about its feasibility (Posner, 1992). Accordingly, Collins (1988) indicated the proportion of people in the United States who agreed with abstinence standard to be between 20 to 80 percent depending on the age and other characteristics of the people.

The other option forwarded as a solution to prevent HIV is being faithful to partner which imply one's commitment to sexual partner (Snyder, 1996). The Ministry of Health of Ethiopia recognizes faithfulness as intervention strategy to reduce the risk of transmission of HIV through heterosexual contact (MOH, 1998).

Finally, the other alternative measure of behavioral change that could considerably reduce the risk of being infected with HIV is the use of condom (Denney and Quadagns, 1992). The Federal Democratic Republic of Ethiopia policy on HIV/AIDS shows the role of condom as intervention strategy (Asnake, 2001).

Though the above three alternatives are recommended in tackling the transmission of HIV, people differ in their preferences among the three options. Perception about the

capability to take preventive methods and effectiveness of the recommended responses determines the practice of preventive measures (shiferaw, 2004).

Studies in Utah school found a modest effect towards greatest acceptance of abstinence for older students, but the junior high school non-virgin showed more permissive attitude (Kimmel and Weiner, 1995).

Perceived efficacy level of college students in north west Ethiopia regarding HIV/AIDS prevention methods indicated that 90 percent agreed that abstinence is effective. Females had preference towards abstinence than males while, males were more confident than females in using condom. However, the response about condom use suggested little practice, which was agreed to be used by only 29.5 percent of the respondents (Shiferaw, 2004).

CHAPTER THREE

METHODOLOGY

3.1. The Study Site

Two private colleges, namely, St. Mary's University College and Admas College were selected purposely for their popularity and ease of accessibility to the researcher.

St. Mary's University College, with the main campus located near "Mexico" square, has three campuses namely "Mexico", "Lideta", and "Deafric" campuses. It runs education in both regular and distance programs. The biggest campus, "Mexico", was located for the purpose of this study.

Admas College has three campuses in Addis Ababa including the main campus. These are "22", "Olompia", "Meskel", campuses which are named after the names of respective locations in the city. The main campus, "Olompia", was selected for drawing sample for the purpose of this study.

3.2. Sampling Procedure

After determining two of the private colleges, St. Mary's University College who had enrolled a total of 7200 students and Admas College 6800 students, main campuses from each was selected because of the availability of administrative staff that is familiar to the researcher for any inconveniences that could happen.

Then, a decision was made to take students from three classes of each college in a way that could involve 230 participants. The classes were randomly selected with the help of the registrar offices of the colleges and an arrangement was made with instructors of each class to contact the students. The researcher and research assistants together with instructors of the respective classes contacted the students during their class times. After

making the necessary explanations and discussions with the students, the questionnaires were distributed to them.

This way a total of 300 questionnaires were distributed, of which 47 were not returned and 23 were discarded for their incomplete and inconsistent responses. Finally, data from 230 students was used for the purpose of this study.

3.3. Research Instrument

A self administered questionnaire having a total of 45 questions was prepared to collect data from the randomly selected participants. The items were organized into five parts; the first part asked for general information about the participants, and the rest consisted of items that measure: participants' knowledge about HIV/AIDS (12 items), behavioral change crucial to the prevention of HIV/AIDS (11 items), risk perception about susceptibility to HIV/AIDS (8 items), appraisal of recommended responses to the prevention of HIV transmission (10 items).

The items were prepared based on the theoretical and empirical evidences obtained in relation to each of the constructs. In addition, some items were adopted from Africa AIDS Initiative (2006) for their expected quality of measuring the required construct. The questionnaire was given to four of Psychology instructors from whom important comments were added to the items.

After making the necessary organizations, 30 questionnaires were distributed to students who were attending in the selected colleges for checking reliability of the items before use. Result of the pre test showed a reliability in the items with $r = .75$

3.4. Data Analysis

Data from 230 participants was made ready for quantitative analysis. Descriptive statistics was used to see the extent of knowledge about HIV/AIDS, behavior/practice related to HIV/AIDS, risk perception of being infected, subjects' appraisal of recommended responses to HIV prevention.

In order to see the relation between behavior/practice related to HIV/AIDS and knowledge, risk perception, appraisal of recommended responses; first items were given values according to their significance in measuring the stated constructs. The significance of the items was determined based on the emphasis given in literatures while dealing with the constructs. Accordingly, a maximum of 3 was given for positive responses of the variables and a value of 1 was given for negative or neutral responses in knowledge and behavior items. In items measuring behavior/practice, frequency of using condom was given a value starting from 3 for always, 2 for sometimes and 1 for not at all. Items measuring risk perception and appraisal of recommended responses were designed in Likert type scale and were given a value of 3 to positive responses to the constructs, a value of 2 was assigned for neutral/undecided responses and 1 was given for those responses that contribute negatively to the variable.

Then, using the scores obtained on each of the variables, a correlation was computed to determine the association between the variables.

CHAPTER FOUR

RESULTS

A total of 300 questionnaires were distributed to students in order to obtain the desired number of sample size (230), out of which 47 questionnaires were not returned. From 253 returned questionnaires, 23 of them were discarded because of their incomplete and inappropriate responses. Finally, data form 230 students was analyzed to identify the level of knowledge about HIV/AIDS; the existing behavioral change/practice related to HIV/AIDS; the level of risk perception about HIV/AIDS; the attitude of students towards recommended responses in reaction to HIV/AIDS. Out of the 230 questionnaires, data from 120 students who were selected on the bases of their sexual practice, were used to determine the association between behavioral change/practice related to HIV/AIDS; and knowledge of HIV/AIDS, risk perception about HIV/AIDS, attitude towards recommended responses in reaction to HIV/AIDS, attitude towards recommended responses in reaction to HIV/AIDS, independently.

The following section presents percentage analysis of respondents for items measuring the stated constructs. The tables present percentage of respondents out of their corresponding sexes and then the total percentage, which is obtained from the total sample, is presented. At the end, correlation analysis is presented to indicate the type and strength of association between behavioral change/practice related to HIV/AIDS and the rest of the variables.

4.1. Knowledge about HIV/AIDS

Knowledge about HIV/AIDS was assessed form subjects' response on the major ways of transmission and preventive mechanisms. Their response to the possibility of determining

the status of being infected or not by looking at the physical appearance of an individual is also checked.

Table 1: Percentage of respondents on knowledge of modes of HIV transmission

Items	Responses								
	Yes			No			I do not know		
	M	F	Tot.	M	F	Tot.	M	F	Tot.
Multiple sexual partner	88.0	94.0	91.5	7.2	3.4	5.0	4.8	2.6	7.0
STD increases chance of infection	83.1	86.3	85.0	0.1	0.8	7.5	9.6	6.0	7.5
Blood to blood contact with infected person does not transmit HIV	25.3	34.2	30.5	68.7	61.5	64.5	6.0	4.3	5.0
Sharing sharp objects	94.0	96.6	95.5	6.0	3.4	4.5	-	-	-
Transmission during pregnancy	81.9	65.0	72.0	9.6	26.5	19.5	8.4	8.5	8.5
Living with infected person	8.4	1.7	4.5	90.4	93.2	92.0	1.2	5.1	3.5

It can be seen from table 1 that significant majority of the respondents have knowledge about the main ways of HIV transmission. In this regard, 88 percent of participants from the male group and 94 percent of the female answered "Yes" to an item asking if practicing sex with multiple sexual partners is one route for HIV transmission. From the total respondents 91.5 percent recognized practicing sex with multiple partners as one possible means of transmission for the virus. Similarly, very high proportion from both male and female groups (94 and 96.6 percent respectively) responded sharing of sharp objects as one cause of transmission. Other STDs were acknowledged to increase the chance of HIV transmission by 83.1 percent of the males and 86.3 percent of the females. Transmission during pregnancy and mixing of infected blood with the normal was recognized as cause for HIV transmission by 72 and 64.5 percent of the total respondents respectively.

From the results obtained, sharing of sharp objects and practicing sex with multiple partners were widely known HIV transmission menses. On the other hand, many respondents (30.5 of the total) did not consider blood to blood contact with infected person as cause for transmitting the virus. There were also participants who did not respond correctly to items stating ways of HIV transmission or who did not know about it. For example, 12 percent of the total participants responded either sex with multiple partners was not way of HIV transmission or did not know about it.

Table 2: Percentage of respondents on knowledge of HIV prevention methods

Items	**Responses**								
	Yes			**Yes**			**Yes**		
	M	**F**	**Tot**	**M**	**F**	**Tot**	**M**	**F**	**Tot**
Condom use	57.8	57.3	57.5	27.7	23.9	25.5	14.5	18.8	17.0
Faithfulness with sexual partner	94.0	88.0	90.5	3.6	6.0	5.0	2.4	6.0	4.5
Abstinence	90.4	90.6	90.5	9.6	8.5	9.0	-	0.9	0.5

Knowledge of respondents about prevention measures against HIV transmission is indicated in table 2 and more than 90 percent from the total respondents considered being faithful with one partner and abstinence as preventive mechanism. Being faithful with partner and abstinence from sex were the most widely known preventive techniques of which relatively more males than females acknowledging being faithful with partner. As compared to these preventive methods, using condom was recognized by only 57.5 percent of the total respondents. The rest did not either considered it as preventive method or know about it.

Table 3: Percentage of respondents' knowledge about determining HIV infection at look

Items	Response								
	Yes			No			I don't know		
	M	F	Tot.	M	F	Tot.	M	F	Tot.
Well built body guarantees being free from HIV	3.6	-	1.5	94.0	94.0	94.0	2.4	6.0	4.5

It was attempted to identify subjects recognition of whether one can know HIV infected person by just looking at his/her physical appearance. Table 3 indicates 94 percent form the total respondents answering "No" to a statement assuring having well built body as indicator of being free from the HIV virus. It is hoped that such recognitions contribute to refrain from engaging in unsafe sexual intercourse with whoever looks health. It should be born in mind that the status of HIV infection in an individual is ascertained only through standard blood testing than the individual's simple physical appearance.

To see the over all knowledge of respondents, mean result on the knowledge items was computed and found to be 26.8 from a possible score ranging between a minimum of 10 to maximum of 30.The males scored a mean result of 27.2 on the knowledge scale while the females obtained a mean score of 26.5.

4.2. Behavior/Practice related to HUV/AIDS

The results obtained while investigating the existing behavior/practice that are related to HIV/AIDS are presented in two parts. After identifying subjects who had sexual experience from those who did not, the first part gives behavior/practice of respondents with sexual experience. Then, responses for items that could be responded by all the participants are presented.

In an attempt to be having sexual experience of subjects, 52.2 percent of the total participants were found to be having sexual experience. 48.1 percent of the males and 55.7 percent of the female group had already started making sexual intercourse (Table 4)

Table 4: Percentage of respondents' sexual experience

Item	Responses					
	Yes			No		
	M	F	Tot.	M	F	Tot.
Had sexual intercourse	48.1	55.7	52.2	51.9	44.3	47.8

4.2.1. Sexual Behavior/Practice

Table 5, presents responses to items referring to sexual behavior/practice. 39.4 percent of the male and 29.2 percent of the females who had already stared making sexual intercourse did not have permanent sexual partners. On the other hand, 24.2 percent of the males and 27.7 percent of females were sexually active within the last 6 months. This implies hat those who sere sexually active in the last 6 months were practicing sex with either non-regular sexual partner or more than one sexual partner. Nearly similar amount of respondents were not willing to avoid sex with someone who was considered as practicing sex with multiple sexual partners.

Knowledge results of respondents had indicated that almost more 90 percent of the participants knew sexual intercourse with multiple partners as one cause for HIV transmission, and being faithful with a partner and abstinence from sex as preventive methods. This would suggest, there wee participants who were engaged in unsafe sexual practices even though they knew about HIV transmission and prevention mechanisms.

HIV/AIDS issues were discussed with sexual partner by 80.2 percent of the participants. Relatively, more females had this habit of discussion than he males. Such discussions can overcome the unfavorable attitude generally observed among the Ethiopian society that made people feel shame when discussing sexual matters. But, it is free discussion on the issue that lets partners maximize their potential to prevent transmission of the virus.

Table 5: Percentage of respondents by sexual behavior/practice

Items	Responses					
	Yes			No		
	M	F	Tot.	M	F	Tot.
Had permanent sexual partner	60.6	70.8	66.7	39.4	29.2	33.3
Sex with casual sexual partner in the last 6 months	24.2	27.7	26.3	75.8	72.3	73.8
Refusing sex with some one who was known to have sexual partner	75.8	77.1	76.5	24.2	22.9	23.5
Discussion about HIV/AIDS with sexual partner	75.8	83.3	80.2	24.2	16.7	19.8

Condom was consistently used during sex by only 37 percent of the total participants. Comparatively, more males (48.5 percent of the males) than females (29.2 percent of the females) had the habit of using condoms all the time during sexual intercourse. The majority (62.9 percent) of the participants used condom for sexual purpose either some of the times or not at all (Table 6).

Table 6: Percentage of respondents in condom use during sex

Item	Responses								
	Always			Sometimes			Not at all		
	M	F	Tot.	M	F	Tot.	M	F	Tot.
How often do you use condom during sex?	48.5	29.2	37.0	18.2	25.0	22.2	33.3	45.8	40.7

The over all manifestation of safe behavior/practice that is related to HIV/AIDS was determined from the mean score which was found to be 25.5 from a minimum score of 10 and a maximum score of 30. The males score was 24.8 while the females scored 25.9 on the items measuring the existing safe behavior/practice which is related to HIV/AIDS.

4.2.2 General Behavior/Practice Related to HIV/AIDS

When we see behavior/practice areas that are common to both sexually experienced and inexperienced participants, standard blood testing was not made by 56 percent of the total sample. As compared with the males, more females had HIV blood testing. The HIV status of a person can be known through standard blood testing and knowing this status is helpful to take subsequent actions for better adjustment in future life.

More than 85 percent of the total respondents answered "yes" to an item asking whether participants had the habit of discussing about HIV/AIDS with friends or family members. Such discussions were considered as important because they create the opportunity to have the right idea about the disease. Possibly associated constructive sexual issues raised during such discussions help individuals to protect themselves from HIV/AIDS.

HIV positive status in the family preferred to remain secret by 33 percent of the participants. In addition, 11 percent of the total participants were willing to care for some

one who was infected with the virus (Table 7). Such scenario indicated the unfair stigma against the victim which subsequently could lead the victim as well as others in danger.

Table 7: Percentage of respondents in HIV/AIDS related general behavior

Items	Responses					
	Yes			No		
	M	F	Tot.	M	F	Tot.
HIV blood test	33.7	51.3	44.0	66.3	48.7	56.0
Sharing of sharp objects	10.8	9.5	9.5	89.2	89.7	89.5
Keeping secret HIV + status in the family	31.3	34.2	33.0	68.7	64.1	66.0
Discussion about HIV/AIDS with friends or family	74.7	93.2	85.5	25.3	6.8	14.5
Willingness to care for HIV+ in the family	81.9	93.2	88.5	16.9	6.8	11.0

4.3. Risk Perception

Participants thought about HIV/AIDS as a risk to themselves was assessed by their response to statements on the Likert scale. The statements also stated conditions that were thought to risky in exposing oneself to HIV virus. Table 8 presents the statements and percentage of respondents according to their agreement to the expressed conditions. The table provides percentage of respondents out of their corresponding sex and the Tot. column gives total percentage of respondents.

Responses to the statements showed majority of the participants thought of risky conditions that could expose to HIV/AIDS or the sense of vulnerability to the problem. For example, 83.1 percent of the male and 70.1 percent of the female respondents disagreed to a statement expressing no concern for sharing sharp objects. 75 percent or more of the total participants agreed with the idea of feeling fear because of HIV when a

thought making sex with multiple partners or sex with a person is known recently comes to their mind.

Table 8: Percentage of respondents on risky conditions

Statements	Responses								
	A			U			D		
	M	F	Tot.	M	F	Tot.	M	F	Tot.
I am afraid of HIV transmission when thinking of sex with multiple partners	81.9	70.1	75.0	14.5	16.2	15.5	3.6	13.7	9.5
Resistance to peer/partner pressure for sex without condom	60.2	56.4	58.0	26.5	20.5	23.0	13.3	23.1	19.0
HIV blood test is not relevant to me	25.3	12.0	17.5	13.3	13.7	13.5	61.4	74.4	69.0
I deliberately avoid situations that might lead to unprotected sexual intercourse	72.3	78.6	76.0	22.9	16.2	19.0	4.8	5.1	5.0
I do not mind to share sharp objects with others	3.6	16.2	11.0	13.3	13.7	13.5	83.1	70.1	75.5
Loss of weight, bruise in my body reminds me of HIV/AIDS	21.7	23.1	22.5	22.9	22.2	22.5	55.4	54.7	55.0
HIV/AIDS messages are relevant to others than to me	26.5	27.4	27.0	16.9	17.9	17.5	56.6	54.7	55.5
I will not be threatened of HIV after sexual intercourse with someone I know recently	4.8	11.1	8.5	14.5	10.3	12.0	80.7	78.6	79.5

On the other hand, there were participants who were not sure about or did not consider the risk of dangerous conditions that may increase vulnerability to HIV virus. This was reflected by more than 20 percent of the total participants under each of the conditions expressed in the statements. For instance, 23 percent of the participants did not decide

and 19.0 percent disagreed to a statement expressing resistance to peer/partner pressure to make sex without condom (Table 8 above).

4.4. Appraisal of Recommended Responses

Responses to items checking for participants' appraisal of recommended responses to HIV prevention is given in table 10. Credibility of source of recommended responses was agreed by 53 percent of the total respondents and 60 percent of the participants agreed on the messages to be understandable. In addition, 62.0 of the participants agreed to a statement expressing the recommended responses not to be difficult to practice.

When it comes to appraisal of individual recommended responses, abstinence was accepted by more participants (64.3 percent) than being faithful to partner or using condom. More female preferred this method than males.

Majority of the respondents had indicated their doubt or disagreement on being faithful to partner (51.5 percent) or using condom (83.5 percent) as preventive method against HIV transmission (in table 9 below).

On the other hand, as shown in table 9 below, more than 35 percent of the participants were either in doubt or showed unfavorable attitude towards the statements about recommended responses. For instance, a total of 52 percent of the participants agreed to a statement expressing absence of confidence in the recommended HIV prevention techniques or were not sure about their feeling.

Table 9: Percentage of respondents on appraisal of recommended responses

Statements	Responses								
	Agree			Undecided			Disagree		
	M	F	Tot.	M	F	Tot.	M	F	Tot.
The source of recommended responses are not credible	21.7	26.5	24.5	22.9	22.2	22.5	55.4	51.3	53.0
Recommended HIV prevention techniques are difficult to understand	22.9	23.1	23.0	15.7	17.9	17.0	61.4	59.0	60.0
Recommended HIV prevention techniques are difficult to implement	24.1	18.8	21.0	16.9	17.1	17.0	59.0	64.1	62.0
I think of my own prevention techniques than the already recommended ones	42.2	35.0	38.0	14.5	16.2	15.5	43.4	48.7	46.5
Recommended HIV prevention techniques are relevant to me	50.6	53.8	52.5	21.7	26.5	24.5	27.7	19.7	23.0
I do not feel confident on the recommended HIV prevention techniques	38.6	21.4	28.5	20.5	24.8	23.0	41.0	53.8	48.5
I suggest the recommended HIV prevention techniques as solution to HIV transmission while discussing with others.	57.8	61.5	60.0	24.1	18.8	21.0	18.1	19.7	19.0
Indicate your agreement to the following three recommended HIV prevention techniques									
Abstinence	60.2	68.2	64.3	34.9	32.5	33.5	3.6	4.3	4.0
Being faithful with partner	50.6	47.0	48.5	44.6	47.9	46.5	4.8	5.1	5.0
Using condom	15.7	17.1	16.5	72.3	72.6	72.5	12.0	10.3	11.0

4.5. Impact of Knowledge, Risk Perception, Appraisal of Recommended Responses on Behavior/ Practice Related to HIV/AIDS

Table 10 indicates correlation between subjects' knowledge, risk perception, appraisal of recommended responses with their behavior/ practice related to HIV/AIDS.

Knowledge has a positive correlation with behavioral change, which implies as one knows more about HIV/AIDS; there will be better behavior/practice in relation to HIV prevention.

The positive correlation between risk perception and behavioral change suggests that when an individual thinks him/her self as vulnerable to HIV transmission under circumstances that could victimize him/her, there will be good behavioral change in protecting oneself from the virus.

Table 10: Correlation among knowledge, risk perception, appraisal of recommended responses and behavioral change

	Knowledge	Behavioral Change	Risk perception	Appraisal of recommended responses
Knowledge	1	.228*	.284*	.404*
Behavioral change	.228*	1	.041	.387**
Risk perception	.284*	.041	1	.434**
Appraisal of Recommended Responses	.404**	.387**	.434**	1

Behavior/practice is also positively related to subject's appraisal of recommended responses. This result implies that as subjects' appreciations of recommended responses get stronger, there will be better behavioral change because of the increased possibility of using those responses.

The correlation result indicated behavior/practice related to HIV/AIDS to be more strongly related to subjects' appraisal of the recommended responses than knowledge about HIV/AIDS or risk perception about it.

CHAPTER FIVE

DISCUSSION

The problem imposed by HIV/AIDS had triggered several studies in the area that forwarded a lot of results in the area. This unit attempts to make discussion on the results obtained in this study in reference to some of the results reported by similar previous studies.

5.1. Knowledge and Behavior/Practice Related to HIV/AIDS

From this study, it was found that HIV/AIDS awareness is almost universal. Ninety five percent of the respondents have heard about HIV/AIDS. This consists 98 and 96 percent of male and female respondents respectively. This is a bit higher compared to the national standard, which is 85 percent in 2000 (CSA, 2001). The difference can be because of subjects of this study have better exposure to information.

With regard to knowledge about HIV/AIDS, results from most of previously conducted studies are consistent with the results found in this study, which identified high mean result on knowledge items (Pro-Pride, 1998; Shiferaw, 2002). Tilahun (1997) also found similar result in that AIDS related knowledge among Gonder Medical College students was generally high.

This could be expected imagining the efforts made by governmental and non-governmental organizations to impart knowledge about the disease throughout the country. Addis Abeba being the capital city, where relatively better facilities are present and people who are exposed to information are residing, knowledge dissemination could hardly be a problem to the population.

Behavioral change that is useful to the prevention of HIV/AIDS is mainly determined from the point of view of practicing safer sex. In this regard, the study found significant proportion the participants manifesting risky behavior. That is, the habit of practicing sex with casual sexual partners or both permanent and casual partners. This is obtained in a situation where more than half of the respondents used condom either only some of the times or not at all.

The unsafe sexual practice noticed here is inconsistent with the knowledge they have acquired about HIV transmission and prevention. The struggle against dissemination of the virus is primarily made through imparting knowledge about HIV transmission and prevention, hoping such awareness could result in behavioral change in sexual practice.

The report from Shiferaw (2002) also presented failure in using knowledge to guide behavior. Moreover, Pro-Pride (1998) has come up with results showing limited behavioral change despite knowledge about the disease.

Similar results were obtained from studies on college students which witnessed adequate knowledge about HIV/AIDS but unsafe behavior/practice manifestation in relation to it (Africa AIDS Initiative, 2006; Beyene; et al., (1997) as cited by Asnake 2001; Tilahun (1997)).

Experiences of this type had forced researchers to look beyond knowledge of HIV/AIDS in order to have effective behavioral change. That is, taking the role of knowledge on behavior as it is; other relevant factors taking part in the issue were also searched. One of the important health models offering an alternative explanation is the Extended Parallel Process Model. This model puts forward the impact of one's perception of the health threat to him/her self as motivator in making reactions that avoids the threat. It means, if the individual feels being at risk of a disease, it is highly likely to engage in behaviors

that could reduce the risk; and the reverse is true (Witte, 1992; Gray & Saracino, 1989; Villarruel et al., 1998).

5.2. Risk Perception

The result on the level of risk perception among the participants revealed the state of being aware of risks if they were going to be involved in a situation that had high chance of transmitting the virus. This is contrary to previous studies by Crooks and Baur (1990), and Shiferaw (2004) that had reported low level of risk perception among their corresponding subjects.

One possible reason for the feeling of being at risk is the significant level of knowledge about HIV transmission and prevention mechanisms among the participants. Having accurate knowledge influences people's attitude toward AIDS and AIDS patients or beliefs about susceptibility of getting AIDS. Because subjects have the awareness about when the has high chance to transmit, they react fearfully to such circumstances. Additionally the difference in the results of this study and particularly that of Crooks and Baur (1990), could also be attributed to differences in their corresponding subjects of study who belong to different cultures.

The response on similar issues from Pro-Pride (1998) was not consistent with this finding. The report indicated adequate knowledge about HIV/AIDS among Woreda 5 (in Addis Ababa, Ethiopia) people, but limited risk perception. This could be due to difference in the time during which the study is conducted. The study is conducted eight years ago when concerned bodies gave emphasis to dissemination of knowledge with fewer attempts of addressing the possibility of infection to everyone. It is reported that HIV/AIDS IEC messages and materials were only able to acquaint students with the

disease rather than equipping them with the necessary domains relevant to their day-to-day life (Teshager & Yehualashet (2004)).

5.3. Appraisal of Recommended Responses

The result of this study showed, relatively large number of respondents approve, abstinence from the recommended responses than being faithful to partner or using condom. A significant number of respondents doubt or disagree on the strategy of being faithful to partners. Moreover an important number of respondents are either in doubt or showed unfavorable attitude towards condom use as one of the recommended responses. The choice for abstinence as the vital prevention methods by the respondents would be attributed to its reliability in relation to the other two measures.

Similar result was obtained in Kimmel and Weiner (1995) and Shiferaw (2004) in which subjects were inclined towards abstinence. Shiferaw (2004) added that more females prefer abstinence than the males.

Some of the reasons mentioned for reduced preference of condom among researchers were perceived decrease in sexual satisfaction, inability to negotiate condom use with partner, social barriers, and belief that condoms are needed only for intercourse with prostitutes (Adewale, 1997; Daniel, 1996).

More males were found to be engaged in premarital sex. Among the reasons mentioned for this were males want to prove their compatibility with their sexual partner before they get married. In addition, male pre marital sex is not only tolerated but also encouraged by the society (Africa AIDS Initiative, 2006).

Being faithful might be a problem unless each of the partners is sure about the faithfulness of the other. As quoted by Asnake (2001) from Beyene (1997) the inaccurate

self perception of monogamy may lead the students to assume falsely that they are safe from HIV, as they would never be absolutely sure about the compliance of their partner. Being faithful works as long as both partners are faithful to one another all the time (Berer, 1993).

5.4. Relation between Behavior/Practice and Knowledge, Risk Perception, Appraisal of Recommended responses

Previous discussions of this study reported high level of knowledge about HIV/AIDS, beliefs of susceptibility of getting AIDS and appraisal of recommended responses (relatively to a lesser extent). Further attempt was made to see the relation between AIDS-related concepts, such as knowledge, beliefs about susceptibility, appreciation of recommended responses, and the manifestation of safer behavior. This is important because, it is usually complained about the absence of behavioral change in spite of the prevailing level of awareness regarding the disease (Emmanuel and Matsuo (200); Asnake (2001); Shiferaw (2004); Africa AIDS Initiative (2006)). Hence, it is important to look for additional factors that could facilitate behavioral change.

Generally, the stated variables had contributions in enhancing behavioral change through their presence. The positive correlations between each of the individual variables with behavioral change are implications for this fact.

The weaker relation between behavioral change and knowledge as compared to the other variables is because of the importance of complementing additional components to knowledge, in order to bring about better behavioral change. In other words, knowledge alone might not be effective to result in safe behavior. Although providing people with information about AIDS and motivating them to avoid unsafe sexual behavior are a

necessary condition for behavioral change, it may not be sufficient for a reduction in the risk of AIDS (Witte, 1992).

For instance, Aiken; et al., (2001) pointed out the significance of perceived susceptibility to a disease as motivator of effective behavioral change against the disease against the disease. Witte (1992) also extended after perceiving treat from a health message, the acceptance of recommended responses in reacting to the threat plays a great role resulting in the desired behavior.

CHAPTER SIX

SUMMERY, CONCLUSION AND RECOMMENDATIONS

6.1. Summary

The intricate problems due to HIV/AIDS, particularly, in the developing countries like Ethiopia motivated this study. And, and attempt was made to identify HIV/AIDS related level of knowledge, existing behavior/practice, risk perception, and appraisal of recommended responses.

In pursuing the study, a total of 230 private college students were taken as sample from two of the private colleges in Addis Ababa and provided their response to items investigating the above mentioned HIV/AIDS related constructs.

Descriptive analysis of responses from subjects indicated that majority of them had knowledge of HIV/AIDS which was demonstrated particularly in the areas of HIV transmission and prevention.

Behavior/Practice related to HIV/AIDS was also found to be in a good position by most of the respondents except for those individuals who practiced sex with more than one sexual partner.

Respondents were also able to consider risky conditions that could expose them to HIV infection and reacted negatively to such conditions. This had implied the feeling of susceptibility to the disease, which was believed to motivate reactions against it.

As to acceptance of recommended responses, abstinence was the first to be approved by respondents. More females than males proffered this method as preventive measure against HIV/AIDS.

Finally, knowledge of HIV/AIDS, risk perception and appraisal of recommended responses were positively related in this study. Stronger correlation was obtained between behavior/practice and appraisal of recommended responses.

6.2. Conclusions

Based on the results obtained the following conclusions were made:

In general, the students know major ways of HIV transmission and prevention.

The extent of feeling at risk of being infected with the virus was also found to be in a good position. In this regard, being uncertain about risky conditions was also observed from the respondents.

When it comes to appraisal of recommended responses, many aspects about recommended responses suggested general acceptance of the recommended responses. However, there was more preference to abstinence than being faithful to partner or using condom.

Behavioral change that could imply safe sexual practice was demonstrated by most of the participants. On the other hand, there were participants practicing sex with multiple sexual partners.

Finally, it was found that knowledge of HIV/AIDS alone could not help much in bringing about effective behavioral change. That is, though its presence takes primary importance, subsequently influential factors like risk perception and appraisal of recommended responses also play great role in imparting behavioral change.

6.3. Recommendations

Based on results obtained from this study the following recommendations were believed to raise points that will be useful in HIV prevention efforts.

- The achieved level of knowledge about HIV/AIDS is encouraging. However, it was observed that condom was not recognized as preventive technique which could have supported in fulfilling the prevention of HIV when the other two (abstinence and being faithful) were not used. Hence, the importance of condom should be advocated for facilitated behavioral change.
- The habit of practicing sex with more than one partner was one of the major routes for HIV transmission and this practice was observed among a significant portion of participants. Therefore, urgent actions are required through IEC campaigns or any other relevant programs to eliminate such misconceptions.
- Important skills that will enable knowledge of HIV/AIDS in to ways of protecting oneself from it seem lacking in some of the participants. It is very crucial to work on developing such skills through assertiveness trainings or similar ones, as it is the way to change knowledge into useful practice.
- Efforts that will be made to bring about effective behavioral change needs to consider the importance of other factors like risk perception and appraisal of recommended responses in addition to the mere dissemination of knowledge. It is the combined effect of these factors that makes behavioral change more effective.
- Finally, additional studies involving more number of participants and factors influencing behavioral change are required to remedy or reduce the problem of HIV/AIDS at its best.

REFERENCE

Adewale, R. (1997). A Comparative Review of Reasons for Use and Non Use of Condom among Male and Female Undergraduate Students of Obatemi Awolowo University, Il-Ife, Nigeria, *Abstract Book*; 1, 398

Aiken, L.S., Gerend, M.A., & Jackson, K.M. (2001). Subjective Risk and Health Protective Behavior: Cancer Screening and Cancer Prevention. In A. Baum, T.A. Revenson & J.E. Singer (Eds.), *Handbook of Health Psychology* (pp. 727-746). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Amsale C. (2002). Percieved Sufficiency and Usefulness of IEC Materials and Methods on HIV/AIDS among High School Youth in Addis Ababa, Addis Ababa.

Asnake, H. (2001). "Attitude Survey on High Risk Sexual Behavior (Intervention Strategy) Relevant to HIV/AIDS with Respect to Gender, Age and Educational Level; The Case of Bahir Dar University Students." (Unpublished MA thesis, AAU).

Berer, N. (1993). Women and HIV/AIDS: An International Resource Book, London, Harpen Collins

Beyene Petros; et al (1997). AIDS and College Students in Addis Ababa: A Study of Knowledge, Attitude and Behavior. Ethiopian Journal of Health Development, 2, 115-123.

Collins, R. (1988). Sociology of Marriage and the Family (2nd edition) Chicago; Helson-Hall, inc.

Concern-Ethiopia, (2002). Report on HIV/AIDS Related Knowledge, Attitude and Practice Survey in Kalu and Kombolcha Woredas; South Wollo Zone, Ethiopia.

Crooks, R. and Baur, K. (1990). Study Guide for Our Sexuality (4th edition), California; The Benjamin/Cummings publishing company, inc.

Central Statistical Authority (2001). Ethiopia: Demographic and Health Survey 2000. Addis Ababa.

Daniel Zemenefes (1996). HIV/AIDS Awareness, Knowledge and Practice in Patients with Sexually Transmitted Disease. Ethiopia Medical Journal, 34, 25-32.

Denney, N.W. and Quadagno, D. (1992). Human Sexuality (2nd edition), St Louis, Mosby-Yearbook, inc.

Emmanuel U. &Hisako M. Impact of Knowledge, Attitude, and Beliefs and AIDS ON Sexual Behavioral Change among College Students in Nigeria: the Case of the University of Nigeria NSUKKA. *West Africa Review:* 3, 2

Fishbein; et al. (2001). The Heterosexual Mode of HIV/AIDS Transmission and the Task of Changing Behavior. Abstract Book; 1, 45-446.

Fumento, N. (1993). The Myth of Heterosexual AIDS, Washington D.C., Regnery Gateway, inc.

Gray, L. & Saracino, M. (1989). AIDS on Campus: A preliminary study of college students' knowledge and behaviors. Journal of Counseling and Development, 68, 199-202.

Kate Ashcroft (2005). Quality of Many Headed Hydera. The Third National Conference in Private Higher Institutions in Ethiopia, Addis Ababa, Ethiopia.

Kimmel, D.C. and Weiner, I.B. (1995). Adolescence: A developmental Transition (2nd edition), New York; John Wiley and Sons, inc.

Ministry of Health (1998), AIDS in Ethiopia: Background, Projections, Impact and Intervention (2nd edition), Epidemiology and AIDS department.

Ministry of Health (2002), AIDS in Ethiopia, Addis Ababa 4th edition

Ministry of Health (2004), AIDS in Ethiopia, Addis Ababa 5th edition

Williams, P. (2000), Failure of Fear: HIV/AIDS Campaign in Africa not working.

Poloko K and Kathlen F. (2002). Behavioral Change: Goals and Means, *AIDS in Africa*, 33, 514-525.

Posner, R.A. (1992). *Sex and Reason*, Cambridge, Harvard University Press.

Pro-Pride (1998). KABP Survey Result on HIV/AIDS among Male and Female Community Members (18-49 years) in Woreda 5 of Addis Ababa. Addis Ababa.

Africa AIDS Initiative (2006); Addis Ababa University Students KABP Survey on HIV/AIDS, STDs and Reproductive Health.

Serovich, J.M. & Greene, K. (1997). Predictors of Adolescent Sexual Risk Taking Behaviors which them at Risk for Contracting HIV. *Journal of Youth and Adolescence,* 26(4), 429-443.

Shiferaw A. (2004). Responses to HIV/AIDS Prevention Messages: Using the Extended Parallel Process Model among College Students in North West Ethiopia, *Ethiopian Public Health Association: Extract of MPH Thesis Works*. 7-12.

Synder, M. (1996). Personality and Sexual Relations; Journal of Personality and Social Psychology . 51, 181-190.

Taylor, C.C. (1990). Condoms and Cosmology: The "fractal" person and sexuality risk in Rwanda. Social Science and Medicine, 31, 1023-1044.

Teshager, M. & Yehualashet, M. (2004). Knowledge, Attitude, Behavior and Practices (KABP) on HIV/AIDS and Related Issues in Selected Towns of Oromiya Region, Organization for Social Services for AIDS, Addis Ababa.

Tilahun T. (1997). AIDS Related Knowledge and Behavior among College Students, Gondor, Ethiopia; A comparative study, *Ethiopian Medical Journal*. 35, 185-190.

United Nations (2003). UNAIDS Report on the Global HIV/AIDS Epidemic, June.

UNAIDS (2002). AIDS; Men can Make a Difference, press release, New Delhi.

Villarruel, A.M., Jemmolot, L.S., Howard, M., Taylor, L., & Bush, E. (1998). Practice what we preach? HIV knowledge, beliefs, and behaviors of adolescents

Witte, K. (1992). Putting the Fear Back into Fear Appeals: The Extended Parallel Process Model, Communication Monographs. 59, 329-39.

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Questionnaire on Behavioral Change and Differences in Response to HIV/AIDS Messages among Students of Private College of Addis Ababa

Introduction

This questionnaire is prepared for a thesis required in partial fulfillment of masters degree in Counseling Psychology. Its purpose is to gather data on students' sexual behavior and differences in their reaction to HIV/AIDS.

Confidentiality and Consent:

We are going to ask you some very personal questions that some people find it difficult to answer. Your name need not be written on this questionnaire, and will never be used in connection with any of the information you tell to us. You do not have to answer any question that you do not want to. However, your honest answers to these questions mean a lot to the meaningfulness of the study. So, we would greatly appreciate your help in responding to these questions.

Part I: General Information

Provide the following information by ticking inside the boxes or writing in the blank spaces.

101. Sex: M ☐ F ☐

102. Age: _____

103. Marital Status: Single ☐ Divorced ☐

Married ☐ Widow/Widower ☐

104. Educational Level you are attending: Degree ☐ 10+2 ☐

10+3 ☐ 10+1 ☐

Part II: Knowledge Questions

The following questions are to assess students' knowledge about HIV/AIDS. Put a tick mark for the questions in the boxes according to your agreement.

201. Have you encountered with messages about HIV/AIDS through the media or other sources? Yes ☐ No ☐

202 Do you know someone who infected with HIV or died of AIDS? Yes ☐ No ☐

No.	Items	Responses		
		Yes	No	I don't Know
203	Multiple sex partner is cause for HIV transmission			
204	Sexually transmitted disease increase the chance of HIV transmission			
205	Condom do not protect from HIV			
206	Blood to blood contact with HIV infected person do not transmit the virus			
207	Being faithful to a partner is one way to protect from HIV			
208	Sharing of sharp objects exposes to HIV			
209	Living with a person who is infected with HIV is means of HIV transmission			
210	HIV infected pregnant mother can transmit the virus to her new child			
211	Well built body guarantees the absence of HIV virus in an individual			
212	Abstinence of sex before marriage is one of HIV prevention mechanisms			

Part III: Questions Assessing Behavioral Change

The questions below are to identify behavioral manifestations in relation to HIV/AIDS. Answer each of them according to the instructions.

301. Have you started making sexual intercourse? Yes ☐ No ☐

Put a tick mark in the boxes according to your practice in relation to the items

No.	Item	Responses	
		Yes	No
302	Do you have permanent sexual partner?		
303	I have made HIV blood test from concern about AIDS		
304	Have you made sex with casual sexual partner in the last 6 months?		
305	Do you share sharp objects?		
306	I would like HIV positive status of a person in my family to remain secrete		
307	I am willing to make HIV blood test any time requested		
308	I am willing to care for a person in the family who is infected with HIV.		
309	I have the habit of discussing about HIV/AIDS with family or friends		
310	I have the habit of discussing about HIV/AIDS with sexual partner		

Indicate the frequency of condom use during sex

No.	Item	Responses		
		Always	Sometimes	Not At all
310	How often do you use condom during sex?			

Part IV: Questions Assessing Risk Perception

Indicate the extent of your agreement to the conditions described in the following statements

A=Agree U=Undecided D=Disagree

No.	Statements	Responses		
		A	U	D
401	I object sex without condom even up on partner's request for fear of HIV transmission.			
402	I am afraid of HIV transmission when thinking of sex with multiple partners.			
403	I do not think HIV blood test is important to me.			
404	I consider HIV/AIDS messages as more relevant to others than to myself.			
405	I deliberately avoid situations that could lead me to unexpected sexual intercourse			
406	If I want to use sharp objects I do not mind whether others have used it or not.			
407	Experiencing significant weight loss, bruise in my body reminds me of HIV/AIDS.			
408	I will not be worried if I perform sex with someone I know for three months			

Part V: Questions Assessing Appraisal of Recommended Responses

Indicate the extent of your agreement to the conditions described in the following statements

In the following statements the term Recommended responses refers to Abstinence, Being faithful, and Using condom

No.	Statements	Responses		
		A	U	D
501	Source of information about HIV prevention techniques are not credible			
502	Recommended HIV prevention techniques are difficult to understand			
503	Recommended HIV prevention techniques are difficult to use them practically			
504	I usually think of my own HIV prevention techniques than using the already recommended ones			
505	The recommended responses against HIV transmission are relevant to me			
506	I usually doubt the effectiveness of recommended HIV prevention techniques			
507	I do not have confidence on the recommended HIV prevention techniques			
508	I stress on the use of recommended responses as HIV prevention mechanism while discussing about HIV/AIDS with others			
	Indicate which of the recommended responses you are willing to use			
509	Abstinence			
510	Being faithful			
511	Using condom			

በአዲስ አበባ ዩኒቨርሲቲ ሳይኮሎጂ ዲፓርትመንት
ለመመረቂያ ጽሁፍ የሚደረግ ጥናት
የተዘጋጀ መጠይቅ

ይህ መጠይቅ የተዘጋጀው ለድህረ ምረቃ ማሟያ የሚያስፈልገውን ጥናት «የግል ኮሌጅ ተማሪዎች የባህሪ ለውጥና ለኤች አይ ቪ/ ኤድስ የመከላከያ ዘዴዎች ያላቸው አመለካከት ንፅፅር» ለማካሄድ ነው። ማንኛውም የሚሰጡት መረጃ በሚስጥር የሚያዝ በመሆኑና ማንነትዎን የሚገልጽ የስም መረጃ መስጠት ስለማያስፈልግ ትክክለኛ ስሜቶን የሚያንጸባርቁ መልሶች ይሰጡን ዘንድ ትብብርዎን እንጠይቃለን። ስለትብብርዎ በቅድሚያ እናመሰግናለን።

ክፍል አንድ፡ ጠቅላላ መረጃ

ለሚከተሉት ጥያቄዎች ከላይ ሳጥኖች ውስጥ የ«X» ምልክት በማድረግ ወይም ከተሰጡት ክፍት ቦታዎች በመግባት ይመልሱ

101. ፆታ ወ ☐ ሴ ☐

10. ዕድሜ

103 የጋብቻ ሁኔታ፡ ያላገባ/ች ☐ ፍቺ የፈፀመ ☐
ባለትዳር ☐ ባለቤት የሞተባቸው ☐

104. የሚማሩበት ደረጃ፡ ዲግሪ ☐ 10+3 ☐ 10+2 ☐ 10+1 ☐

ክፍል ሁለት፡ የዕውቀት ጥያቄዎች

የሚከተሉትን ጥያቄዎች የተማሪዎችን እውቀት በኤች አይ ቪ / አድስ ዙሪያ ለመገምገም የተዘጋጁ ናቸው። በባዶ ሳጥን ውስጥ የ«እ» ምልክት በማድረግ ከተሰጡት አረፍተነገሮች ጋር የሚስማሙበትን ሁኔታ ያሳዩ።

201. ስለ ኤች አይ ቪ / አድስ የሚተላለፉ መልክቶች በመገናኛ ብዙሐን ወይም ሌላ ምንጭ አጋጥሞት ውቃል?

አዎን ☐ አይደለም ☐

202 ከኤች አይ ቪ ቫይረስ ጋር አብሮ የሚኖር ሰው ወይም በኤድስ ምክንያት የሞተ ሰው በግልዎ ያውቃሉ? አዎን ☐ አይደለም ☐

ተራ.ቁ.	ጥያቄ	አዎ	አይደለም	አላውቀውም
203	ከአንድ በላይ የወሲብ ጓደኛ ለኤች አይቪ ቫይረስ ያጋልጣል።			
204	ሌሎች የአባላዘር በሽታዎች የኤች አይ ቪ መተላለፊያ እድልን ያሰፋሉ			
205	ኮንዶም መጠቀም ኤች አይቪን ለመከላከል አይረዳም።			
206.	ኤች አይቪ ቫይረስ በደሙ ያለ ሰው ደሞ ከደማችን ጋር ቢቀላቀል ቫይረሱ ላይተላለፍብን ይችላል			
207	እራስን ከኤች አይቪ ለመከላከል በመተማመን ላይ የተመረኮዘ የአንድ ለአንድ ተቃራኔ ያታ ጓደኝነት አንዱ መፍትሔ ነው			
208.	ስለት ያላቸው እቃዎችን በጋራ መጠቀም ለኤች አይ ቪ ቫይረስ ያጋልጣል			
209.	ኤች አይ ቪ ካለበት ሰው ጋር አብሮ መኖር አንዱ የቫይረሱ መተላለፊያ መንገድ ነው			
210.	ኤች አይቪ በደሚ ያለ እናት ቫይረሱ ወደ ተወለደ ልጇ ሊተላለፍ ይችላል			
211.	ጥሩ የሆነ አካላዊ አቋም (ተክለ ሰውነት) ከኤች አይ ቪ ነፃ መሆንን ያመለክታል			
212.	ከግብረ ስጋ ግንኙነት መታቀብ ኤች አይ ቪን ከመከላከያ ዘዴዎች አንዱ ነው			

ክፍል ሶስት፡ ኤች አይ ቪ / ኤድስን የተመለከቱ ባህሪያት መለክያ

ለሚከተሉት አረፍተ ነገሮች ባህሪዩን ይገልባል ብለው በሚያምኑበት መልኩ የ«እ» ምልክት በሳጥን ውስጥ በማድረግ ያመለክቱ

301. የግብረ ስጋ ግንኙነት ፈጽመው ያውቃሉ? አዎን ☐ አይደለም ☐

ተራ.ቁ.	ጥያቄ	አዎ	አይደለም
301.	መደበኛ እና የግብረ ስጋ ግንኙነት የምታደርጉ የተቃራኒ ፆታ ጓደኛ አለዎት?		
302.	ኤች አይ ቪን በተመላከተ ያለብትን ሁኔታ ለማወቅ በራስዎ ፍላጎት የደም ምርመራ አድርገዋል?		
303.	ባለፈው 6 ወር ውስጥ ከመደበኛ ጓደኛዎ (ካሎት) ከሌላ ተቃራኒ ፆታ ጋር የግብረ ስጋ ግንኙነት ፈጽመዋል?		
304.	ስለት ያላቸው ነገሮች ከሌሎች ሰዎች ጋር በጋራ ይጠቀማሉ?		
305.	ኤች አይ ቪ ያለበት ሰው በቤተሰብዎ ካለ ጉዳዩ በሚስጥር ቢያዝ ይመርጣሉ?		
306.	የኤች አይ ቪ የደም ምርመራ በማንኛውም ጊዜ ለማድረግ ፈቃደኛ ነኝ		
307.	በደሙ ኤች አይቪ ያለበት ሰው በቤተሰቤ ቢኖር እንክብካቤ ለማድረግ ፈቃደኛ አልሆንም		
308.	ብዙ የወሲብ ጓደኞች ጋር ግብረ ስጋ ግንኙነት የመፈፀም ልምድ ካለው ሰው ጋር ወሲብ አልፈጽምም		
309.	ከወሲብ ጓደኛዬ ጋር ስለ ኤች አይቪ /ኤድስ የመወያየት ልምድ አለኝ		

• ኮንዶም የመጠቀም ልምዶትን ያመለክቱ

ተራ.ቁ.	ጥያቄ	ሁል ጊዜ	አንዳንድ ጊዜ	አልጠቀምም
310.	የግብረ ስጋ ግንኙነት ለመፈፀም ም ኮንዶምን ምን ያህል ይጠቀሙበታል?			

ክፍል አራት ፡ የኤች አይ ቪ /ኤድስን አደጋ ግንዛቤ የሚመለከቱ ጥያቄዎች

ለሚከተሉት አረፍተ ነገሮች በሚስማሙበት ሁኔታ በሳጥኑ ውስጥ የ«X» ምልክት በማድረግ ያመልክቱ

ተራ.ቁ.	ጥያቄ	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም
401.	በማንኛውም ዓይነት ተጽኖ (በተለይ በጓደኛ ገፋፊነት) ያለኮንዶም የግብረ ስጋ ግንኙነት አልፈጽምም			
402.	ከብዙ ሰው ጋር የግብረ ስጋ ግንኙነት መፈፀም ሳሰብ የኤች አይ ቪ አደጋ ይታሰበኛል።			
403.	የኤች አይ ቪ የደም ምርመር ማድረግ ያስፈልገኛል ብዬ አላስብም			
404.	ኤች አይቪ /ኤድስን የሚመለከቱ መልዕክቶች ከራሴ የበለጠ ሌሎችን የሚመለከቱ ይመስለኛል			
405.	ላልታሰበ የግብረ ስጋ ግንኙነት ያደርሱኛል ብዬ የማስባቸውን አጋጣሚዎች /ሁኔታዎች በቅድሚያ አስወግዳለሁ			
406.	ስለት ያለው እቃ መጠቀም ካስፈለገኝ ዕቃውን ሌላ ሰው መጠቀም አለመጠቀሙ አያሳስበኝም			
407.	የክብደት መቀነስ፣ ቁስል ወይም ተቅማጥ በሚከሰትብኝ ጊዜ ከኤች አይ ቪ ጋር በተያያዘ ስጋት ያድርባኛል።			
408.	የደም ምርመራ ሳናደርግ ከ3 ወር በኋላ ከማውቀው ሰው ጋር የግብረ ስጋ ግንኙነት ብፈጽም ብዙም አያሳስበኝም።			

ክፍል አምስት: ኤች አይ ቪ /ኤድስን ለመከላከል የሚመከሩ ዘዴዎችን አቀባበል መለከ.ያ

ለሚከተሉት አረፍተ ነገሮች ስለሚናገሩ ኤች አይቪ /ኤድስን የመከላከያ ዘዴዎች ያለዎትን አመለካከት የ«ሂ» ምልክት በማድረግ ያመልክቱ::

በሚከተሉት አረፍተ ነገሮች ውስጥ «የመከላከያ ዘዴዎች» የሚያመለክተው 3ቱን የመ ህጎችን (መታቀብ፣መወሰን፣መጠቀም) ነው::

ተራ.ቁ.	አረፍተ ነገር	እስማማለሁ	እርግጠኛ አይደለሁም	አልስማማም
501.	የመከላከያ ዘዴዎቹ ገዳዩ ከሚመለከታቸው ባለሞያዎች የተገኙ ናቸው ብዬ አላስብም::			
502.	የሚነገሩት የመከላከያ ዘዴዎች የተመለከተ መልክ"ች ለግንዛቤ ያስቸግራሉ			
503.	የሚመከሩትን የመከላከያ መንገዶች ተግባራዊ ማድረግ ያስቸግራል			
504.	ከሚነገሩት የመከላከያ ዘዴዎች ይልቅ የራሴ መከላከያ ዘዴ አስባለሁ::			
505.	የሚነገሩት የመከላከያ ዘዴዎች ለኔ ሁኔታ የተመቹ ናቸው			
506.	ብዙውን ጊዜ በሚነገሩት የመከላከያ ዘዴዎች ላይ አመኔታ የለኝም::			
507.	ስለ ኤች አይ ቪ /ኤድስ ከሌሎች ጋር ስወያይ የሚነገሩትን የመከላከያ ዘዲዎች እንደ መፍትሔ አቀርባለሁ::			
	ከሶስቱ መ ህጎች ከቫይረሱ ይከላከላል/ሉ ብለው የሚያስቡትን ያመልክቱ			
508.	መታቀብ			
509.	መወሰን			
510.	መጠቀም			

Declaration

I here by declare that this thesis is my original work, has not been presented for a degree in any other university and that all source of materials used for the thesis have been duly acknowledged.

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Signature: _____

Date: June 28/2007.

This thesis has been presented for examination by me as a university advisor.

Name: S.N. Dubey (Dr.)

Signature: _____

Date: June 28/2007.