

ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
FACULTY OF JOURNALISM AND COMMUNICATION

# Multimedia Condom Promotion, Protection Motivation and Condom Use among Male Students of Addis Ababa University

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by  
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Addis Ababa

# Multimedia Condom Promotion, Protection Motivation and Condom Use among Male Students of Addis Ababa University

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## **List of Acronyms and Abbreviations**

<b>AAII</b>	African Aids Initiative International
<b>ART</b>	Anti-Retroviral Treatment
<b>CYP</b>	Couples Years of Protection
<b>DMFSS</b>	Disaster Management and Food Security Sector
<b>EDHS</b>	Ethiopian Demographic and Health Survey
<b>FAO</b>	Food and Agriculture Organization of the United States
<b>HAPCO</b>	HIV/AIDS Prevention and Control Office
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
<b>IEC/BCC</b>	Information Education and Communication/Behavioral Change Communication
<b>ISAPSO</b>	Integrated Services for AIDS Prevention and Support
<b>MOH</b>	Ministry of Health
<b>NACP</b>	National AIDS Control Program
<b>NHCS</b>	National Health Communication Strategy
<b>NGO</b>	Non-Governmental Organization
<b>PSI</b>	Population Services International
<b>SMART</b>	Social Marketing Assessment and Response Tools
<b>STIs</b>	Sexually Transmitted Infections
<b>UNAIDS</b>	United Nations Program on HIV/AIDS
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>WHO</b>	World Health Organization

## **Abstract**

*Preventive interventions strategies, like the promotion of condoms, are important in the fight against HIV/AIDS. Though, condoms are promoted widely on the media, it is not adequately investigated how the intensity of the messages impacted young boys in colleges to use condom. Besides, the intention to use condoms is affected by the level of HIV risk perception. Thus, this study examined the effect of exposure to multimedia condom promotions on condom use. It also assessed the relationship between HIV risk cognition and condom use frequency among male students of Addis Ababa university (n=336). Both quantitative and qualitative data was collected through questionnaire, focus group discussions and in-depth interviews. Intensity of exposure was measured by counting the number of media sources on which students recall messages. Media exposure was found to be positively correlated with condom usage. Hence, students who recall an increased number of condom promotion messages were more likely to use a condom than those who recall fewer messages. A bivariate correlation analysis also confirmed a positive relation ( $r = .231$ ) between message exposure and condom use ( $p < .01$ ). The same was true with partial correlation relation ( $r = .219$ ) controlling for some demographic variables. HIV risk assessment was also a motivational factor for consistent use of condoms. The cross-relations between the variables in protection motivation theory (severity, vulnerability, response efficacy and self-efficacy) showed that consistent condom use resulted when there was higher level of threat appraisal followed by coping appraisal. Accordingly, those who perceived that HIV/AIDS is serious and feel vulnerable to it, were likely to use a condom frequently when they accept condom as a remedy and have the confidence to use it. So in the combined analysis almost 60% of the respondents who fulfill the above criteria have always used a condom. Vulnerability and self-efficacy were also the two behavioral indicators which predict intentions to consistent condom use among male students of Addis Ababa University.*

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background**

This section explores the case of HIV/AIDS in Ethiopia. It also overviews the impact of the epidemic on higher institutions in Ethiopia.

#### **1.1.1 HIV/AIDS in Ethiopia**

Ethiopia is one of the sub-Saharan countries which are affected highly by the HIV/AIDS epidemic. It is also the sixth most affected nation in the world in terms of both the number people living with HIV/AIDS and deaths related to the diseases (World Fact Book, 2004). The Ministry of Health (MOH) estimated that in 2005 the “fitted” national HIV prevalence reached 3.5% (MOH, 2006). The ministry also indicates that there is high virus prevalence in urban communities and, it is Addis Ababa which has the highest infection rate of 11.7%. The report further claim that AIDS is responsible for an estimated 34% of all young adult deaths aged 15-49 in the country. Meanwhile, in urban areas 66.3% of all young adult deaths of same age group are caused by this epidemic.

The countrywide mitigation and control efforts so far showed progress as the overall HIV prevalence rate stabilized through the years (MOH, 2006). However, the MOH acknowledges that, the urban prevalence rate is still at “unacceptable” high rate of 10.5% and some behavioral indicators like condom use are not at the optimal level.

There is yet a long way to go. The spread of the virus is still aggravated by the existence of stigma and misconception about the disease. In addition to this, low level of knowledge about the virus transmission and poor protection practices have contributed to the problem. The enormousness of the task in fighting this epidemic is obviously clear. Yet, more is needed to be done to effectively influence individuals’

behavior and bring change. Hence, the coordinated efforts of stakeholders at all levels are important.

The mode of transmission of the HIV virus in Ethiopia is mainly heterosexual. Only a small amount of HIV infections are observed through other modes of transmission such as contaminated blood transfusion (Abdulhamid, 2008; Ethiopian Demographic and Health Survey, EDHS, 2005). This proves that unsafe sex is widely practiced in Ethiopia. The heterosexual transmission of the virus also hints the existence of sexual contacts with multiple partners.

HIV/AIDS has been given a priority in the Ethiopian government health policy. Since the first case was detected in 1984, a National HIV/AIDS taskforce was established and later, National AIDS Control Program (NACP) was set up as a department at the Ministry of Health. A National HIV/AIDS policy was also adopted by the Council of Ministers in 1998. The policy focuses on effective prevention strategies and has main objectives like: promoting inter-sectoral collaboration in fighting HIV/AIDS, combating discrimination against people living with HIV/AIDS and providing care for them, providing supportive environment for AIDS orphans and survivors, and encouraging research on HIV/AIDS (MOH, 2000). As a significant gesture in the fight against this epidemic, the Ethiopian government also established the HIV/AIDS Prevention and Control Office (HAPCO) under the proclamation no. 276/2002.

Communications on issues related to HIV/AIDS is widely observed in Ethiopia. The media plays an important role in this regard. It seems so, that knowledge about AIDS is widely spread across the nation. Among women aged 15-49 and among men of the same age group, the awareness level reached 90 and 97 percent respectively (EDHS, 2005).

When the prevalence of the virus is examined, women are affected more than men. A community-based survey on individuals aged between 0 and 49 in Addis Ababa

for example shows that in age group of 15-24, the virus prevalence was 6% for females while it was only 3% among males (Fontane et al. as cited in Yared et al., 2008). Though the cause for higher virus prevalence among the youth has its own social, economical and biological justifications, empowering them with the necessary life skills and information is vital. The media in this case need to go yet a long way. Most already existing television and radio programs on youth and women have framed the issue of HIV/AIDS as a priority. Nevertheless, they lack proper planning in audience based research and program design to address the complex issues of the disease (Abayneh, 2008).

### **1.1.2 HIV/AIDS and Higher Education**

Researches like that of the EDHS (2005) indicated that, in Ethiopia educated people have been found more vulnerable to HIV than less educated people. This is a clear indication to the fact that HIV/AIDS is a treat to the country's education sector. Higher virus prevalence in higher institutions also implies that a danger posed on the knowledge economy of the country which is believed to be built by education and educated people. The impact can also be felt further on the overall wellbeing of the society as higher education institutions are the functional bases that play a pivotal role in solving the problems pertaining thereto.

Even though research evidences about the impacts of HIV/AIDS on higher institutions, such as colleges and universities, are limited in Ethiopia, some available findings shows that the virus prevalence in those entities is undoubtedly high. For instance, in Jimma University the virus prevalence rate reached 12.2 % in 2001 (Abebe, 2008).

Abebe's (2008) study on the challenges and opportunities of mainstreaming HIV/AIDS in higher institutions also pointed out that there has been very little effort made by the institutes to draw strategic frameworks for interventions. He also finds out that there is inadequate understanding on the role higher education should be

playing, in response to HIV/AIDS prevention. Furthermore, the absence of formal structures in universities and colleges to accommodate those units like, anti-HIV/AIDS clubs; and dependence on external finance (on NGOs) are some of the challenges. Yet, most of the leaderships in the institutes divert their priorities to other academic issues and those who act as a focal person perceive their responsibility as a part time duty (Abebe, 2008).

University students are well aware of HIV/AIDS. A study in Addis Ababa University, for instance, indicates that there is a universal knowledge of HIV/AIDS transmission and prevention methods. The source of information is predominately the media. Though the research indicates that there is a desirable tendency to reduce non-regular partners and increase condom use after an intervention program, a considerable number of students reported not to have demonstrated significant behavioral change (ISAPSO, 2002).

If higher institution students are among high risk group, and more susceptible to HIV, there emerges an indication for the need to revise or reinforce the already existing communication strategies. Hence, this research is a humble attempt to identify the attitudes, perceptions and motivations of male college students towards condom promotion messages and condom use. On the basis the dose-response media exposure theory and protection motivation theory of behavioral influence, it tries to assess the impact of condom promotion messages on male students of Addis Ababa University. Since in Ethiopia condom social marketing is largely carried out by DKT Ethiopia, an international NGO subsidiary, the research will be concerned to those promotions done by the aforementioned institution.

## **1.2 Statement of the Research Problem**

Tackling the consequences of unsafe sex, such as HIV/AIDS, Sexual Transmitted Infections (STIs) and unwanted pregnancy needs immense and diversified intervention strategies. Condom has been promoted as one remedy in this regard.

Condom has been found to be effective in reducing the spread of HIV virus and other STIs. In situations where HIV virus is spreading more rapidly, promoting condom use has shown positive results. The experience in Thailand and Uganda is a good example for this. Likewise in Ethiopia, the social marketing program of DKT Ethiopia is doing this by advocating condoms as a means for preventing the sexual transmission of the HIV virus. It is claimed that DKT Ethiopia is responsible for more than 75% of condom distribution in Ethiopia.

Though knowledge about HIV/AIDS is pervasive in Ethiopia, the virus prevalence rate is still among highest in sub-Saharan Africa. A mere awareness about the disease is not yet sufficient enough to change people's behavior. The fact that the significant mode of the virus transmission being heterosexual implies that unsafe sex is widely practiced.

Condom is still the best technology available to prevent sexual transmission of the HIV virus. It is quite obvious in circumstances where high virus prevalence is observed promoting condom for protection has a paramount importance. More often, in Ethiopia most promotions frame condoms to male users. We can take for example the DKT Ethiopia's motto "value your life" which is used to promote its brand *Hiwot Trust*. In its Amharic sense "your" refers masculinity. The theoretical assumption for this is quite simple. As male condoms are meant for male users, directing the messages towards them is reasonable. Besides, it is argued that targeting condoms only from the point view of women imposes two fold task, persuading the women about the importance of condom on one hand, and encouraging them to negotiate safe sex (using condom) with a partner, on the other. This doesn't mean that empowering women to negotiate safe sex should be given a secondary importance.

Encouraging the youth towards adopting consistent and appropriate condom use and thereby changing their behavior towards practicing safe sex, is vital in HIV prevention. Researches show that, the infection level increases in line with

education, which simply means highly educated people have been found more susceptible to HIV than those people who have lower level of education. Moreover, high-risk sex (having sex with multiple partners and non-marital sex) also increases as level of education increases. Hence, harnessing communications on prevention and protection to those youth in colleges and universities is needed as they have been found more vulnerable to HIV virus than other sects of the society.

The youth, especially in colleges, have to endure many challenges. Those who are away from their families for example, are tempted to try out sex and other habits like smoking cigarettes, and drinking alcohol. The relative absence of their family control, the pressure exerted from their peers and the environment where they study have also an impact on their attitude and behavior. Therefore, the likelihood for them to practice early and unprotected sex can be higher.

One significant part of the social marketing program of DKT Ethiopia is the promotion of condoms as means of prevention for HIV and STI. The promotion of condoms through various media is to create awareness, availability and affordability of the products. DKT uses various media: TV, radio, newspapers and other print advertisement like posters and billboards to reach people across the country. So as to support the fight against HIV/AIDS, DKT Ethiopia aggressively promotes condoms of its own brand to high risk groups. Though condoms are widely promoted in the media, it is not adequately clear how exposure to this intensive promotion messages (i.e. through multiple medium) have influenced young boys in colleges to use condom.

Then, a question may arise, if college students are among high risk group vulnerable for HIV/AIDS and STIs, are the existing condom promotions through multimedia good in encouraging male Addis Ababa University students to use condom and shape their perceptions? Or they are simply tedious and redundant? Some available researches indicate that there exist a positive relationship between multiple exposures to a health- related message and a change in behavior. Jato et.al (1999)

for example find out a positive correlation between exposure to family planning messages and contraceptive use in Tanzania. In the same manner, Bessinger et al. (2003) also point out that multimedia campaigns have influenced condom knowledge and use in Uganda. In addition to message exposure, communication interventions based on protection motivation theory in addressing health risk situations form a causal link between individuals' risk perception and actions (see for example McClendon & Prentice- Dunn, 2001 research on reducing skin cancer risk).

So the intention in this research can be viewed in two levels. One is to analyze the impact of the already existing condom promotion through various media on condom use. The other is to predict those behavioral indicators which enhance consistent condom utilization and thereby supplement future message developments.

Hence, by using the dose-response media exposure and protection motivation theories as the underlying assumption, this research asks:

1. What is the impact of exposure to multimedia condom promotions messages on condom use, among male students of Addis Ababa University?
2. What is the level of brand awareness and preference of DKT Ethiopia Products?
3. What is the attitude of male Addis Ababa University students towards condom?
4. What is the relationship between HIV risk cognition and condom use frequency?

### **1.3 Objectives of the study**

The objective of this study is to explore the impact of exposure to multimedia condom promotion messages on condom utilization among male Addis Ababa University students. It is also indulged to optimize future communication by

identifying those behavioral intentions of students towards consistent use of a condom. Thus it is the aim of the research to:

1. To measure the impact of exposure to condom promotion messages on male students' condom usage.
2. To assess the attitude of male Addis Ababa University students towards condoms.
3. To examine the relationship between risk perception and condom use frequency among male university students.
4. To make recommendations on future message developments, that can be used to promote condoms.

#### **1.4 Significance of the Study**

The threat posed by the HIV epidemic on the youth needs immediate and coordinated action. Having higher institution students more vulnerable to the conditions of HIV/AIDS and STIs simply indicates the importance of preventive intervention more driven by theory based communications. The Ethiopian government health communication strategy advocates prevention strategies as its guiding principles so as to achieve better results in the health sector. The strategy in its preamble states that, "the establishment of the National Health Communication Strategy (NHCS) was necessitated by the needs to provide direction and leadership in strengthening IEC/BCC interventions in the country" (NHCS, 2004). Thus, those communications on persuasion and behavioral change have been given a paramount importance.

The impact of HIV/AIDS on education is immense. It is also directly related to the economic wellbeing of the country. According to the World Bank, the impact of HIV/AIDS on education makes a vicious circle. As the virus prevalence worsens it increases teacher and student deaths. Increase in Teacher deaths means increase in out-of-school students and orphans; and at the same times it leads to the decline in the quality of education. This in turn increases illiteracy level and the capacity of the

skilled labor force will sharply deteriorate. With poor capacity of the skilled labor force a country's economy will suffer a decline and public budget for health and education dries up. Hence, prevention interventions will be significantly low leading again to higher virus prevalence (the World Bank as cited in Abayneh, 2008).

The findings of this research directly and indirectly inform those interventions of HIV prevention concerning higher institution students. It can be a good input to the DKT Ethiopia's condom social marketing program too. By analyzing the effects of exposure and HIV risk perception on the behavior of the students, it gives hints on those areas of message development that emphasis should be given. Hence future promotion campaigns can take some of the recommendations in to consideration. Besides, the theories used in this research have significant implication in solving other health treats like malaria and tuberculosis.

Thus, the theoretical and methodological implication of this research helps the development of future health communication campaigns. The implications can also be taken further to improve public safety issues ranging from hygiene to road traffic safety condition.

### **1.5 Scope of the Study**

The research is conducted in Addis Ababa University selected campuses. Addis Ababa University is one of the largest universities in the country where students from different part of the country study. Addis Ababa University is selected for this study due to its size. It houses four colleges, eight faculties, five institutes, and four schools.

Moreover, Addis Ababa, the capital, has the largest HIV/AIDS prevalence percentage in the country (MOH, 2006). It is therefore significant enough to take this university in to consideration and conduct this research. The research is conducted in two selected campuses namely, the Sadist kilo campus (main campus), Arat kilo (Science

campus). The two campuses are selected because of the difference in the academic discipline orientations. The difference in academic orientation, i.e. between natural and social science streams, can be a good input for further analysis. The study is also limited to male Addis Ababa university students. This is because of the assumption that condom (male condom) is ultimately used by male users (though empowering women to use condoms has its own significance). Male students are also selected due to time and resource constraints.

## **1.6 Limitations of the study**

This study has a number of limitations.

- Those students from Addis Ababa have been found in less number in the sample because the data is collected in and around students' dormitories. And most students from Addis Ababa do not use this service.
- Some behavioral responses such as consistent condom use are often subjected to bias. And the responses found may not necessarily be full or accurate.
- The research also inadequately addressed the effects of alcohol and Khat which is becoming more common among students and affect condom use habits.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

Enormous bodies of literatures have interconnected communication with development. An attempt is made in this chapter to present literary works that are related to communication and its role for social change. The presentation starts by giving an overview of the umbrella concept development communication. Then it continues focusing on theories of health communication that guide behavioral change, followed by the strategies. Emphasis is also given to those theories and strategies which are common in health risk communication.

#### **2.1 Communication for Social Change: Development Communication Overview**

Communication's role in social development is indisputable. Since the onset, different theories and strategies in development communication, stressed this fact. Can development be achieved through communication? No radical and immediate answer is available to this question. However the essence of communication in solving problems in societies is generally acknowledged. This is because communication enhances the sharing of knowledge and information between people. Fraser & Villet (as cited in FAO 2005: 11) put the relationship between communication and development as follows:

If development can be seen as a fabric woven out of the activities of millions of people, communication represents the essential thread that binds them together... A development strategy that uses communication approaches can reveal people's underlying attitudes and traditional wisdom, help people to adapt their views and to acquire new knowledge and skills, and spread new social messages to large audiences. The planned use of communication techniques, activities and media gives people powerful tools both to experience change and actually to guide it.

This explanation correlates those key concepts like communication, development and human activity. Communication in the above sense seems to focus on a range of

levels of communication; such levels from intrapersonal to mass communication. For Fraser and Villet, communication helps to draw individuals' abilities (traditional wisdom and knowledge) and adopt new ones (through behavioral influence), by enhancing human interaction. Thus, through various human activities and interactions the sharing of different attitudes and knowledge drives a society in to better living conditions or development.

Though the conduit of information in the above explanation appears to flow both ways, the claim that communication can bring development, in the beginning the concept's conception, focused mainly on the dissemination of information to the disadvantaged via mass media. Communication was conceptualized simply as the transmission of information from sender to receiver with the intention of creating some effect (Rogers, 1973). However, "The intended effect was usually limited to making the receiver aware of some view, new product or course of action. Neither the social process of communication, nor the influence of communication on behavior, received enough consideration" (Piotrow et al., 1997:17). Before the shift in paradigm of the field then, development communication had been defined as the spiritual impulse in the translation and dissemination of information to the underdeveloped world so as to bring modernization in a form of industrialization and new technology (Negussie, 2008).

Development communication is about using "communication strategies and principles" so as to alleviate such challenges like illiteracy, poor health and poor infrastructures in economic, social and political arena of the developing world (Waisbord, 2001). The understanding of development as a linear and evolutionary process (i.e. the transformation of societies from previous condition to a new one) is mainly reflected in the above mentioned definitions of development communication. And at the same time the initial enthusiasm that carried away many scholars put communication as an indispensable tool to bring development (FAO, 2005).

Development (most commonly sensed as, modernization) as an end, and communication as a means, is therefore rooted on a “dichotomous conception” of societies as traditional and modern (Eisenstadt, 1976). This dichotomy understands traditional societies as underdeveloped, and their condition is characterized by low level of industrialization and mechanization, poor agricultural output, poor health and education facilities etc. It is therefore clear in this explanation that economic growth has been given emphasis and used as a measure to explain development (See Schramm’s explanation of the old paradigm, 1976 pp. 45). Yet, the inadequate explanation of ‘tradition’ and the degree of its involvement to impede or facilitates development pose a challenge to the above conception of underdevelopment. Hence, gauging development only by the yardsticks of economics (economic growth) and treading out its causes only in relation to the traditions of developing nations, were the two limitations of the old paradigm. But later, development was made to take in to account the roles of local communities in drawing up strategies. This shift in paradigm also signals the revision to the role of communication in social development (Rogers, 1976).

To address the consequences of underdevelopment and thereby change the living condition of the disadvantaged, the remedies set by scholars have twofold focus. In one category those theorists have claimed that the under root cause for underdevelopment is lack of information. Thus, media had been believed to have such power to elucidate information to the mass about technological innovations and create an appetite for change (Rogers, 1976). On the other hand, those who believe that underdevelopment is the result of power discrepancy in societies argued that the dominate power holders have caused the situation due to their excessive expansion to accumulate resources (Waisbord, 2001).

As it can be deduced from the above explanation, the belief that media can fill the gap in information and information in turn change behaviors and attitudes- so that people adopt new perspective that will help them change their situation- is the idea

behind communication for development. Thus, behavioral change models and strategies play a dominant role in development communication.

Theories and strategies in development communication have been brought from other disciplines like psychology, sociology and marketing. Similarities can be drawn between some of the claims of these theories. Some theories focus on individual behavior change while others put emphasis on communities. As, many are the theories, the reference made to them also varies in different literatures. Those, which appear as theories on one literature, referred as models or strategies on others. The preference made in this research to separate the theories of behavioral change communication from the strategies and discuss one after the other. Since theories on behavioral change communication are the ones that guide the strategies, they come first in the discussion. Waisbord (2001) give a good account of development communication strategies separating the trunks from the trees, while in Salem et.al (2008) the theories on behavioral change are grouped in to two basic categories namely: theories of behavioral prediction and theories of behavioral change. Prediction theories help to identify those intentions that prompts people to perform (or not to perform) a certain health related behavior. Conversely, theories of behavioral change tell us how people change their behavior (Salem et.al., 2008). It is based on these two literatures that the next section is presented. It is quite impossible, if not irrelevant, to discuss all the theories and strategies exhaustively. Only some, which are pertinent to this research, are discussed below.

## **2.2 Behavioral Prediction Theories**

In this particular section an attempt is made to explore those prediction theories used in behavioral change communication. Though the application of these theories can be derived to many health and health related contexts, emphasis is given to those theories which are commonly used in health risk communication. In fact these theories are the ones that guide communications in the strategies. Most importantly,

in social marketing, the application of these theories is becoming more common (Lefebvre, 2000). Commonly seen, in health risk communication, messages are formulated to arouse fear (Witte et al., 2001). Fear is seen as acquired drive to change individuals so that they would be refraining from performing a risky behavior. However, according to Witte, et al Meyer and Martel (2001) the messages could explicitly or implicitly state the treat and the recommendations as well (Witte et al., 2001).

Some of the fear appeal theories used in the formulation health risk communication campaigns are discussed in the next section.

### **2.2.1 Protection Motivation Theory**

Protection motivation theory developed by Rogers (1983) base its claim on individuals' appraisal of fear posed by a health threat. Depending up on a person's appraisal of a health threat and the appraisal of coping responses, an individual may lead himself/herself towards performing positive behavior or may continue performing those risky ones. So self protection from a health risk depends on:

- a) The perceived severity the health risk (in this case HIV/ADIS is a serious disease)
- b) The perceived vulnerability of a health risk (when a person believes he/she is vulnerable for HIV/ADIS).
- c) The perceived effectiveness of the recommended action(response-efficacy, condom can reduce HIV risk)
- d) The confidence of a person to do the recommended action (self-efficacy, I am confident to use a condom)

A change in behavior in this theory is presented as a function of two appraisals: treat appraisal and coping appraisal. When a person believes that he is in danger of a serious (sever) health risk (vulnerability) he/she tend to cope with that risk by adopting the recommended remedies. This however depends on his/hers self

confidence and the assessment of the recommendation. Thus when the assessment of risk is high and the motivation and confidence towards performing the recommended act is positive, a change in behavior would result. Otherwise maladaptive responses which can be expressed in terms of denial or avoidance of the recommendations will prevail (Boer & Seydel, 1999).

Rogers in this theory focused on danger control (Witte et al., 2001:15).

Messages that describe the probability of a health treat occurring lead to perceptions of one's vulnerability or susceptibility to the treat. For example, how much does the message make you feel at risk for actually experiencing the treat? Second, message statement about the magnitude of noxiousness of a treat lead to perceptions about the severity of a treat. For example, does the message make you think the treat is serious and significant or small and trivial? Finally, message descriptions of the recommended response lead to perceptions of the response efficacy of the recommendation. For example, does the message make you believe the recommended response would work, that is effectively avert the treat?

### **2.2.2 Health Belief Model**

Health belief model is very similar with Protection motivation theory. According to this theory people would be likely to change their behavior and take action whenever the below mentioned conditions are met:

- a. When they perceive that they are at risk of a given health treat (perceived susceptibility).
- b. When they believe that the health risk is would have serious consequences (perceived severity)
- c. When they have a positive expectation towards taking the recommended course of action (perceived benefits)
- d. When they believe that taking the recommended action will outweigh the costs or barriers.

The health belief model has been found to be more effective in prevention strategies (Champion & Skinner, 2008). Champion and Skinner (2008) also claims that for a health behavior change to occur, people must feel that they are in danger or feel threatened by their current action. They must also feel that they are self-efficacious and changing their behavior would benefit more. Yet, Champion & Skinner (2008:50) continue:

Diverse demographic, socio-psychological and structural variables may influence perceptions and thus, indirectly influence health-related behavior. For example, socio-demographic factors, particularly educational attainment are believed to have an indirect effect on behavior by influencing the perception of susceptibility, severity, benefits and barriers.

### **2.2.3. Theory of Reasoned Action**

Theory of reasoned action developed by M. Fishbein and I. Ajzen (1975), claims that people's adoption of a certain behavior, is driven by their intent. This is to mean that individuals will adopt a certain behavior based on their attitude towards that behavior and their perception of the consequences of that behavior in their society (Fishbein & Ajzen as cited in Piotrow et. al., 1997).

In the above explanation it can be observed that, personal perception and the belief about the possible consequences of an action are the two key elements that determine the person's attitude towards a certain behavior. In theory of reasoned action therefore, we can see two levels of behavioral influence that determine the strength of the person's intention to perform a certain behavior. One is originated from the person's own judgment and evaluation and on the other from the social group (Ajzen & Albarracin, 2007).

### **2.2.4. Social Learning Theory**

Social learning theory states that behavior is the result of three reciprocal factors: behavior, personal factors and outside events (Bandura, 1977). Key emphasis is given to external environment in shaping individuals behavior. However, social

learning theory claims that the relationship between people and their environment is quite complex (Nutbeam, 2006). Individuals are likely to shape their behavior not only by factors in their environment (for example laws and regulations) but also by the indirect social influence of other people. This is what Bandura refers as “reciprocal determinism”.

Social learning theory give emphasis on the environment as it is the source of observational learning. By observing what is going on in their environment, people learn an action, measure its consequences and would be motivated to adopt or reject it. For people to learn and model a certain behavior then, remembering what is observed (retention), the ability to replicate what is observed (reproduction) and a sufficient reason for them to adopt that behavior(motivation) are important components that govern observational learning( Bandura, 1977 ).

### **2.3. Theories of Behavioral Change**

Theories of behavior change tell us about the process on how individuals change their behavior. Some of them are presented in this section.

#### **2.3.1. Diffusion of Innovations**

Communication is vital for social change to take place. Social change, as defined by Rogers and Shoemaker (1971), is “the process by which alteration occurs in the structure and function of a social system” (Rogers & Shoemaker, 1971: 7). Change in society according to Rogers and Shoemaker (1971) can be classified in to two:

1. *Immanent change*: a change which is occurred when society members invent or develop new idea without external influence or intervention. It is “within-system phenomenon”.
2. *Contact change*: this type of change occurs when outsiders introduce a new idea. It is “between-system phenomenon”.

Change can also be occurred at individual or social system level (Rogers & Shoemaker, 1971). And so development is considered as one type of change in a society. The relation between social change (as a form of development) and communication as a process is explained by the theory of diffusion of innovations. Diffusion of innovations is therefore a theory that claims new ideas and innovation can be spread in to a society through communication. Basically communication in this theory is intended to affect the receiver's behavior. Rogers (1983), claims that the intention in diffusion of innovations, is to bring an "overt behavior change" on the receiver. Whether it is accepted or rejected the diffusion campaigns should focus much more on behavior change because knowledge change and persuasion could not necessarily bring behavior change, though they are the necessary conditions (Rogers, 1983). Innovation in this case can be an idea, practice or a new object.

### **2.3.2. Stages of Change Theory**

Stages of change sometimes referred as, Transtheoretical Model, theory explains a behavior change as a process that has different levels of status. The proponents of this theory Prochaska, et al. (2008) explain that behavior is a process not an event. They develop five stages which explain individuals' motivation and readiness to change. These are:

1. **Pre-contemplation:** a stage where change is not considered by individuals
2. **Contemplation:** a stage where specific behavior change is considered by individuals.
3. **Determination:** In this stage an individual makes sound commitment for change.
4. **Action:** in this stage behavior change is initiated.
5. **Maintenance:** change in this stage is sustained and gains are also enjoyed.

In designing a communication program, the implication of this theory is helpful. It present the different stages in individuals' behavior change. It doesn't assume

individuals having the same level of behavioral status because of different reasons. Thus intervention programs can be tailored and sequenced in accordance with the audience behavior condition and other circumstances (Prochaska et al., 2008).

## **2.4. Strategies that Guide Behavior Change**

Strategies are much more action oriented. They took a combination of the above mentioned theories in to consideration to guide a communication intervention programs.

### **2.4.1. Health Promotion and Education**

Health has been one of the main focus areas in development communication. It is considered as a determinant in measuring the wellbeing of a society. The World Health Organization (WHO, 1986:2) defined health promotion as “the process of enabling people to increase control over the determinants of health and thereby improve their health.” Health in the above definition is meant to include physical, mental and social wellness of people.

The ultimate objective of health communication is influencing individuals’ behaviors so as to help them adopt favorable health outcomes. So through various forms of communication, information could be shared, understood, absorbed and discussed among the intended audience (Schiavo, 2007). Communication is viewed in Schiavo’s (2007) explanation as a process of understanding and sharing meanings.

Health communication in health promotion has been dominated by the conventional methods of education. Hence the diffusion of information and knowledge to change attitude and beliefs seemed to neglect the important of environmental and social factors. But later in the field, in addition to individual influence, emphasis was also given on mobilizing social resources and enhancing policies as well (Waisbord, 2001).

### **2.4.2. Entertainment Education**

Entertainment education is a process in which the media is used to educate and entertain people at the same time (Singhal & Rogers, 2004). Generally in this form of communication, the desired social change can be occurred at individual or community level (Singhal & Rogers, 1999). Media entertainment programs such as soap operas, cartoons, serial dramas, and theaters, are used to transmit the intended message. Entertainment education, according to Signal and Rogers (1999:9) contributed to social change in two ways:

First it can influence audience awareness, attitudes and behaviours toward a socially desirable end. Here, the anticipated effects are located in the individual audience members.... Second, it can influence the audiences' external environment to help create the necessary conditions or social change at the group or system level. The major effects are located in the sociopolitical sphere of the audiences' external environment.

With the premise that most people in the world are exposed to entertainment media and while entertaining educating is possible, entertainment education sought to bring behavior change. However, entertainment in a situation where a health intervention need technical or culture specific messages, (like in HIV/ADIS and family planning) challenges are immanent (Piotrow & Fossard, 2004). Piotrow & Fossard (2004) also stress the fact that too much education cannot entertain and too much entertainment also fall short of education. Therefore in developing an entertainment program it is important to take in to consideration the characteristics of the health intervention and relate it with the audience's social and cultural norms (Piotrow & Fossard, 2004).

### **2.4.3. Social Marketing**

One of the strategies that focus on the use of communication theories to change individuals' health behavior is social marketing. Social marketing with simple explanation is the use of marketing strategies to social cause as opposed to commercial benefits. The proponents of this strategy, Kotler and Zaltman (1971)

define the concept as “the design, implementation and control of programs calculated to influence the acceptability of social ideas and involving considerations of products, planning, pricing communication, distribution, and marketing research.”

The ideas of social marketing are derived from the techniques of commercial marketing used to influence consumer behavior. Simply put those ideas used to influence consumer behavior in commercial marketing are used in social marketing to influence health behavior. However, what makes social marketing different is its emphasis more on ideas than products (Lefebvre & Flora, 1998). Consumers in the actual world don't buy a commodity, rather they buy solutions to their problems. With this idea in mind marketers provide consumers more “imaginative” and “intricate” solution which seduces buyers of a particular product (Hasting & Stead, 2006).

“Marketing is a social managerial process by which individuals and groups obtain what they need and want through creating, offering, and exchanging products of value with others” says Kotler (1997). To satisfy their needs and wants, people need products and services. Whether it is a physical product or an idea, people attribute value to it according to the level of satisfaction they expect to obtain (Kotler, 1997). According to Kotler, the concept of marketing rests on four major pillars: target market, customer needs, integrated marketing and profitability. Target is to refer the selection of possible consumer group. Customer needs ranges from *stated needs* which are obvious and expressed needs to *secret needs* like fame and admiration that people do not express directly (Kotler, 1997).

What is common both in social marketing and commercial marketing is the influence in consumption behavior. Even if the influence on consumption behavior in commercial marketing is to increase commercial benefits, the theoretical implication that explain consumer behavior and the techniques used to implement

it, has significant benefits to social marketing interventions. So it is good to raise the techniques of consumer behavior so as to relate it to health behavior.

#### **2.4.3.1. Consumer Behavior and Health Behavior**

Consumer behavior in marketing studies the process of how individuals, select, buy, use, and dispose a product, service or an idea (Belch & Belch, 2001). Without using the psychological determinants of human behavior as an underlying assumption, studying consumer behavior seems insufficient. However, there are also some theories that stress the importance of environmental and cultural factors that affect consumers' learning process (see Mooij's, 2004 explanation of culture and consumer behavior). Cognitive learning theories describe consumer behavior as a function of internal psychological processes such as perception and motivation. Whereas behavioral learning theories stress on external environmental stimuli, through which a consumer learns and adopts a behavior (see Blech & Blech, 2001 pp.125-130). The basic assumption behind these explanations of behavior is that if the marketer understands how people behave and react to different situations, then the findings can be deduced into a marketing situation which aims to sell or promote a product (Kernan et al. 1970; Kotler 1997)

In their explanation of behavioral determinants of marketing promotion Kernan et al. (1970) took a dichotomy of two approaches to explain behavior. The first approach explains behavior as a process. Behavior as a process includes those "action oriented" processes. Action here is to refer *behaving* (the person's overt actions) and *thinking*, the person's imaginary actions. The second approach explains behavior as structures. Structures in this sense include culture, social groups and personality that affect people's choice. While action oriented behaviors determine how a person takes measures towards using a particular product, those behavioral structures affect how these actions take place (Kernan et al., 1970).

One significant contribution of this theory is that it gives emphasis on the cognitive determinants of behavior. Cognition affects consumer's consumption decisions. This

is because consumption decisions are made in conformity with the consumers' own view of reality, and his behavior is the result of this reality (Kassarjian & Robersson, 1968). It is therefore difficult to imagine the existence of human behavior out there be itself or without the social framework of an individual. However, relying only on psychological variables to explain human behavior will not produce the whole picture as behavioral processes take place within the structure of an organized society (see Blech & Blech, 2001 explanation on consumer's learning process). In addition to its importance in explaining individual behavior, the above explanation's emphasis on cognitive structures also helps to analyze social process of groups as well.

Behavior with simple explanation includes peoples' actions, activities and conducts (Nutbeam, 2006). It is also such a buzz word in health communication and development communication for that matter. Most public health interventions employ those theories that focus on individual behavior change. It is also observed that influencing or changing behavior is considered as the ultimate step in encouraging people towards a certain course of action. Hence, evidence shows that theories of human behavior enrich pre-determined public health interventions though; other socio-economic factors also have comparable importance. Nutbeam (2006:25) stress this fact as follows:

Experience tell us that health promotion programmes are most likely to be successful when the determinants of a health problem or issue are well understood, where the needs and motivations of the target population are addressed, and the context in which the programme is being implemented has been taken in to account. ...there is substantial evidence from published researches demonstrating that the use of theory will significantly improve the chance of success in achieving pre-determined programme objectives.

The theoretical assumption for this kind of thinking is that most human behaviors are learned rather than being innate (Bandura, 1977). Albert Bandura explains thoroughly how people adopt a certain behavior by observational learning. In his

theory, social learning theory, he argues that human behavior is adopted through learning from the environment. According to him, most “instinctual behaviors” are largely adopted through learning even though they appear to be innate. And yet, he continues, complex behaviors are formed through different set of patterns and activities (Bandura, 1977). Bandura also emphasized that the environment that people live in can be the cause for people to behave in a certain way.

Both in marketing and health, the emphasis given to understand human behavior is quite clear. The affects and formations of human behavior in marketing are studied to optimize sells and consumption. With the same token, in health interventions, human behavior is analyzed to enhance the adoption of favorable health condition. Thus, the assumption that behavior guide action is basic in both marketing and health.

#### **2.4.3.2. Key Principles of Social Marketing**

Attaining behavioral change is not an easy task to do. Though rigorous advertising and promotion is part of social marketing interventions, the proponents of this strategy argue that social marketing is capable of doing the job if it is guided with the following key principles (Hastings & Stead, 2006; Schiavo, 2007; Lefebver & Flora, 1988; Storey et al., 2008):

- a) Social marketing is concerned with voluntary behavior change. Customers should not be passive receives of the alternatives presented to them by social marketing campaigns. Imposition would result in resistance and rejection. Hastings and Stead(2006:142) for example stress the importance of voluntary behavior change as follows:

It soon becomes apparent that we seek more than health and safety in life. Social marketers recognize that failing to understand these subtleties can push us down to the road towards being directive. When people don't do what we wish-quit smoking, drink

sensibly-we get cross and blame them. Not responding to the importance of risk-taking also feeds the delusion that there is such a thing as the universally ideal public health product.

- b) The customer is first. Customer focused interventions are likely to succeed than those which put products before the customer.
- c) Social context should be taken into consideration. It is important to know where customers live, how they carried out their routines and identifying stakeholders is also important.
- d) Segmentation; specific intervention for specific type of audience.
- e) Relationships are better than transactions. Better relationships enhance community participation and build trust.
- f) Making competitive analysis and strategic planning. Understanding those market forces (whether they are entities who offer another product or service or stakeholders who pose competitive pressure) should be taken in to account.

With the above guiding principles a social marketing program can be implemented to promote an idea or a product. The key steps are summarized as Social Marketing Assessment and Response Tool (SMART) in the works of Thackeray and Neiger (2003). These steps include the preliminary planning to identify a problem and set general objectives, audience analysis and channel selection to consumer needs and preferences and tailoring communication thereto, market analysis and establishing the market mix, developing intervention materials and conduct pretest, and finally implementation and continuous evaluation (Thackeray & Neiger, 2003).

In the above mentioned steps managing and implementing a social marketing program, identifying the market mix is important. The marketing mix is the blending of four elements namely product, price, place and promotion (Lefebver & Flora, 1988). These are what are commonly known as the four Ps in social marketing.

**Table 2.1 the Four Ps in Social Marketing**

<b>P</b>	<b>Definition</b>
<b>Product</b>	An idea, behavior, service, or tangible item that the target audience adopts
<b>Price</b>	What consumers have to give up to adopt the product; can be psychological or tangible
<b>Place</b>	Where consumers will receive the product, engage in the behavior, or be exposed to communications
<b>Promotion</b>	The means of communicating the message to the target audience

Adapted from Thackeray & Neiger, (2003)

#### **2.4.3.3 Criticisms**

Though social marketing appears to encourage participation and voluntary behavior change, it has not escape criticisms. As the techniques and strategies of social marketing are borrowed from commercial marketing, the rigorous advertising and promotion in this approach consider the consumer as a passive receiver (Hastings & Stead, 2006).

In addition to this, those who criticize social marketing claims that intervention are centrally planned by organizers with out the involvement of local communities. Thus, the top down approaches do not involve local communities especially in the decision making process. And consequently, change will not be materialized with out the active participation of the local people (Shiavo, 2006).

Despite this, social marketing is widely used in health interventions especially in the provision and distribution of contraceptives and condoms. Experience shows that in developing countries like that of Ethiopia the promotion and distribution of subsidized contraceptives and condoms increased through the years (EDHS, 2005).

## **2.5. Condom Social Marketing**

Condom social marketing programs have helped make condoms available to uses in developing countries. In the year 2000, 1.2 billion condoms were sold at subsidized prices in 59 countries (DKT International, 2002). While social marketing is mostly associated with the promulgation of an idea than a product, some still advocate the advantages of product promotion in social marketing programs. Harvey (1997:153) for example point out this advantage saying “ social marketing programs promoting the use of a product have distinct advantages over programs attempting to change behavior... perhaps the most critical of these advantages is measurability.” In Harvey’s argument a measurement concept known as Couples Years of Protection (CYP) is used to assess the effectiveness of a social marketing program that aim to sell condoms and other contraceptives (Harvey, 1997).

Another advantage of product social marketing according to Harvey rests on promotion. It is easier to brand and promote a product for Harvey, because when a branded product is heavily advertised it can become a generic name. He took for Example the case of DKT Ethiopia brand *Hiwo Trust*. “*Hiwot* in Ethiopia have reached the level of generic terminology that provides definite point-of-purchase advantages”. Besides, he further claims, branded promotions do not patronize and facilitate purchase (Harvey, 1997).

“Condom social marketing programs have made condoms more available, affordable and acceptable in many of the world’s poorest countries” (UNAIDS, 2000: 8). UNAIDS have outlined that the various social marketing programs help the availability of condoms elsewhere (other than pharmacies and health centers) and people discuss about condoms freely than before (UNAIDS, 2000).

### **2.5.1. Condoms in HIV Prevention**

The story of condoms goes back to the ancient Egyptians at around 1000 BC. While Egyptians used a linen sheath for protection against diseases, it was the Chinese

who have used oiled silk paper as condom. Yet, the oldest condoms (made of fish and animal intestine) ever found dated back to 1640 were found near Birmingham, England (Dooley, 1994). Though condoms made of animal intestine were widely used in Europe, the application of latex to produce condoms came late in 1930s after a significant development in rubber production. After that, improvements have been made in condom shape and texture. In 1950s for example, the reservoir tip was introduced while in 1970s textured condoms were made available (Youssef, 1993).

Condoms are promoted mainly for HIV prevention despite their dual purpose in preventing unwanted pregnancy and STIs. Condoms are not however 100 percent effective protections. When used appropriately a quality assured latex condom is 98 % effective in HIV protection (Lambadina, January 2008). The question is, if condoms are not fully effective why bother to promote condom use? The reason is simply because, 100 percent protection is possible only when a person is able to abstain. Besides, condoms are, the only technology available for protection from sexually transmitted HIV, and are life saving product (Chaya et al., 2002). Most significant prevention efforts that include condoms are better and cost effective and evidence showed that in those places where HIV prevention efforts have been successful, condoms play a key role (Chaya et al, 2002). Though they are not fully sufficient, condoms are still necessary for the realization of HIV/AIDS prevention efforts. Yet, the overall success is dependant on strong political leadership, appropriate funding, supportive policies and well planned and coordinated programs (UNAIDS, 2001).

### **2.5.2. Challenges to condom use**

Health experts generally agree that, condoms can block body fluid contacts nearly 100 percent. This effectiveness depends up on proper and consistent application of condoms (Carey, 1992). Consistent and proper applications of condoms in HIV prevention effort do not come always easy. Some individual and societal challenges impede interventions. Norms of sexual behavior in many societies and the wrong perception towards using condoms for safe sex remain a challenge for condom

promotion, no matter how condoms are provided with low price (Chaya et al., 2002). Chaya, Amen & Fox (2003: 13) also relate the challenges of condom promotion with gender roles too:

Concepts of masculinity lead men in many setting to take sexual risk, including seeking out multiple partners, engaging in unprotected sex, and avoiding clinical settings as sources of information and services. Notions of femininity make it difficult for women to discuss sex and reproduction with their partners, and may also inhibit their mobility, restrict their access to health services and the resource to pay for them, and subjects them to violence or coercive sex.

Thus, no matter how universal awareness of HIV/AIDS and methods through which HIV infection can be prevented is pervasive, translation knowledge in to action is still challenging (Mulwo et al., 2009). According to them, the challenge is evidenced by the inconsistent condom use and high level of infection rate. Besides, they added, constructed gender role in society, beliefs of fertility, and socio-economic condition of societies are some of the contextual challenges towards appropriate condom use (Mulwo et al., 2009).

### **2.5.3. Condom Social Marketing Selected Case Studies**

The following case studies are adopted from UNAIDS (2001). Abridgment of the case is presented to make a glance of the experiences of some countries condom social marketing programs.

#### **2.5.3.1 Community Based Condom Social Marketing in Mozambique**

The condoms social marketing program in Mozambique aimed to make condoms available to the rural masses that are separated by mountainous terrains and valleys. The condom social marketing program was carried out by Population Service international (PSI). Community Agents (CAs) were trained with sells and interpersonal skills to promote the brand, *JeitO*. Together with mass media campaigns, dramas, theater and small group discussions were also included in the program. The results were encouraging; more than a million people in the target

population were addressed and more than 3000 local sales outlets were established. From the two programs it was learned that community based intervention can be more successful. This is because people developed trust to their own leaders and community members than outsiders. Besides, it had been observed that, people got motivated to use condoms more after they saw fellow community members using them. Intensive promotion that combined both interpersonal and the media have been found to be more effective (UNAIDS, 2001)

### **2.5.3.2 Condom Social Marketing in Kenya**

In Kenya social marketing programs (that of condoms and others) have been carried out by many organizations. Therefore there was a considerable national experience in Kenya. The case discussed here is the programs carried out by the Kenya Midwives project of the Futures Group Europe. The program aimed to improvement of access to afford-able reproductive health products and services by population segments that were very difficult to reach by traditional means. So a strategy was developed to present at locations which are more accessible and frequently accessed by these people. Thus, it was decided to establish reproductive health kiosks in market places in 12 districts in Nyanza Province and the Nairobi area.

A total of 38 nurses/mid wives were trained and set up to operate in a wooden kiosks specially built for this purpose. Then the necessary supplies such as vaccines, contraceptives, family panning kits and condoms were procured by negotiating with pharmaceuticals and condom manufacturers. These mini-kiosks served as mini clinics by supplying people with the necessary medical supplies such as condoms and contraceptives and treating people as well. Measuring overall successes was difficult however, the number of clients jumped from 164 thousand to 989 thousand per annum in two years time. Religious resistance was one of the significant challenges of the project (UNAIDS, 2001)

### **2.5.3.3 Condom Social Marketing in Ethiopia: the Case of DKT Ethiopia Condom Social Marketing program**

DKT Ethiopia is the one of the oldest country program of DKT International. It is believed that the DKT Ethiopia program covers more than 75% of the condom distribution in the country (DKT Ethiopia, 2009). The social marketing program of DKT Ethiopia focuses mainly on three intervention areas namely: HIV/AIDS prevention, family planning and child survival. Its branded products are marketed through wide range of distribution networks across the country. Condoms are promoted as a means of HIV and STIs prevention. While different forms of contraceptives are socially marketed for family planning, the oral rehydration formula brand *Lemlem* is distributed for child survival. Salespersons, pharmacies, supermarkets, small shops, rural drug stores and hotels are DKT Ethiopia's distribution networks that insure the availability of condoms at affordable price (interview with Konjit, a program officer).

DKT Ethiopia has a favorable government support for its programs. Its strong partnership with the government is evidenced by such support it gains like duty free status for its products. It also gets free broadcast air time for product promotion. DKT Ethiopia has also a signed triplet agreement with the Ministry of Health and Disaster Management and Food Security Sector. In addition to this, DKT Ethiopia has a strong collaborative relationship with national and regional as well as district health offices and other non- governmental organizations (DKT Overview, n.d)

The overall country program of DKT Ethiopia sought to increase contraceptive prevalence and reduce the sexual transmission of the HIV virus by making high quality contraceptives and condoms available and affordable. So as to achieve these objectives, the social marketing program of DKT Ethiopia has major components like:

- Media communication of HIV/AIDS and family planning.
- Production and distribution of IEC materials to change knowledge and behavior of target population,
- Awareness creation and distribution of products.
- Health care providers' training.

The condom social marketing program of DKT Ethiopia started in February, 1990 introducing its brand *Hiwot Trust* in to the market. Since then, two other product brands, *Sensation* and *French Feelings* were added in 2004 and 2006 respectively. *Sensation* condom is marketed in three varieties. One variety is ribbed and the other two are manufactured in coffee and honey flavors. Likewise, French Feeling Condoms have also three flavored varieties: strawberry, chocolate and banana.

DKT aggressively engage in marketing and promotion to create awareness and availability of its products. When we see the market history of each condom brand, *Hiwot Trust* is found to be the oldest of all. Its program started in early 1990. The brand name has become almost synonymous with condoms quite for a long time before the rival brands came in to the market. Since 1990, then the condom sales distribution statistics shows a tremendous increase in sales except for years 2003 and 2004. The highest condom sales are recorded in 2002 when over 67 million condoms were sold (DKT Ethiopia, 2009).

The promotion of condoms is carried out using various media. TV and Radio are mainly used to promulgate messages. Sexually active aged people and high-risk groups are mainly targeted in the productions. In addition to TV and Radio, print messages on newspapers and magazines, billboards, outdoor Digital Screen (Sonic) posters, signs on cross-country buses, Mobile Video Units and other IEC materials are used to promote the brands. DKT Ethiopia also sponsors events like the *Great Ethiopia Run* where the gathering of many people is possible. In 2004, DKT Ethiopia took a noticeable step in condom promotion when it introduced the former *Miss*

*Ethiopia* beauty pageant winner as a condom spokesperson. Despite being female and Muslim, Hayat Ahmed, continues to feature in condom advertisements especially in promoting *Sensation* brand. Her appearance both on TV, outdoor digital screen, and billboards are constant reminders of condoms.

Advertisements of condoms are quite intense. In year 2008, for example, the brand *Sensation* is advertised on 33745 TV and outdoor digital Screen spots. The following table summarizes the program interventions as follows:

**Table 2.2 DKT Ethiopia Condom Promotions Intensity**

<i>Type of Media</i>	<i>Spots/Number</i>	<i>Remarks</i>
TV and outdoor Digital screen	33745	For <i>Sensation</i>
TV	48	Generic messages
Radio	368	For <i>Sensation</i>
Print	21	Depicting all three brands
Billboard and Cross Country Bus	101	
Mobile Video Units	1283	Shows
Events	28	

*Source:* DKT Ethiopia annual report, 2008

Mobile Video units showcase different messages on a custom made vehicle to rural areas especially on market days. According to DKT annual report (2008) close to 639 thousand rural people are reached through this medium in the year ended December, 2008. Close to 40 big billboards are mounted on major streets of Addis Ababa of which 10 are used to advertise the brand *Sensation* while *Hiwot Trust* and *French Feelings* are depicted on 8 and 6 billboards respectively. Besides, leaflets and other giveaway materials are also used to promote and educate people. Leaflets are mainly used to educated people on condom use procedures and to change people's attitudes towards condoms.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

This chapter presents the theoretical and conceptual framework used in this research. It also presents the research design and methodology along with the measurable variables.

#### **3.1 Theoretical and Conceptual Framework**

Theories and principles that guide a social marketing intervention which aim to promote condom are quite several. In applying these theories, it is important to make a relation between a communication strategy and the health behavior for which alteration is needed. The intended change in behavior can be achieved at individual, group or societal level. This change can range from an intention to attend for e.g. "use condom" programme in short term, to a lifestyle change in the long run (Levy & Zeltman, 1975). The focus of this research is limited to only behavioral change that occurs at individual level.

In order to achieve the research objectives, two theories in health communication have been applied. The dose-effect media theory is used to investigate the effects of exposure to media promotion through multiple mediums. Numerous body of literatures have suggested the relations between exposure to mass media health messages and positive behavioral change in family planning and HIV/AIDS (Piotrow et al, 2004; Jato et.al, 1999; Bessinger et al., 2003)

The dose-effect theory put emphasis on information intensity. Consequently, the more individuals are exposed to multimedia messages the greater would be the likelihood of change. This theoretical assumption is taken from the concept "dose-response" in medicine, which is used to assess the effects of exposure to a certain drug. "Dose-effect analysis tests for changes in behavior related to levels of exposure to the communication programme, statistically controlling for socio-economic characteristics" (UNICEF, 2005:55)

In addition to the above theory, protection motivation theory is also used in this research to assess the relationship between HIV risk perception (HIV risk assessment) and consistent condom use. This theory provides theoretical base on how to increase a healthy behavior through persuasive communication emphasizing risk. According to protection motivation theory of Rogers (1983), once information on a certain health treat is communicated, it arouses two cognitive processes namely treat appraisal and coping appraisal. McClendon and Prentice-Dunn, (2001) explain the claims of protection motivation theory linking the different variables. Accordingly, if a person's treat appraisal is guided by the intrinsic rewards (like the physical pleasure gained by not using a condom in this case) and extrinsic rewards (such as partner's approval of not using a condom) then that person will keep on performing the risky behavior (avoiding condom use). Coping appraisal is related to the person's ability to changing a risky behavior. This however depends on two factors, i.e. response-efficacy and self-efficacy. Response-efficacy is simply to refer the result of the person's positive attitude towards the recommended remedy (in this case use a condom always). The self confidence of the person in performing the recommended action is what is referred by Rogers as self-efficacy (McClendon & Prentice-Dunn, 2001).

Protection motivation theory is basically used in this research because of two reasons. One reason is because it explains how a certain health behavior is aroused, sustained or changed. In a situation where by a health risk like that of HIV/AIDS is communicated, identifying those psychological processes which enhance or impede change is important. This is simply to mean that this theory helps to predict the factors that prompts people to perform (not to perform) a health-related behavior (Salem et al., 2008). This in the researcher opinion helps to tailor made future communication strategies. The second reason is protection motivation theory provides measurable variables such as severity, vulnerability, response-efficacy, and self- efficacy.

### **3.2 Measurable Variables**

Basically in this study, three sets of variables were used in the analysis. Respondents' background characteristics were used as controlling variables. Condom promotion message exposure was used as independent variables while condom utilization is made as dependent variable in assessing multimedia exposure effect. In the same token HIV risk perception variables: severity, vulnerability response- efficacy and self-efficacy variables served as independent variable while condom use frequency was put into operation as dependent variable in measuring the effects of risk cognition on condom utilization frequency. Five background characteristics: the respondents' place of high school study, age and academic stream and performance were used in the analysis.

The intensity of exposure to multimedia condom promotions messages is analyzed by counting the number of medium in which students recall messages. Jato et. al (1999), and Bessinger et al. (2003) for instance analyze the effect of exposure to multimedia messages by counting the number of message recalls on different media. In analyzing media communication effects ad recalls also provide a measurable variable (Belch and Belch, 2001). Thus, it is not uncommon to measure exposure of messages by counting the amount of recalls on different media. "Basic recall is of interest as a preparatory condition of other forms of impact [media impact], from factual learning and education to informed political participation" (Jensen, 2001: 145)

### **3.3 Study Area**

Addis Ababa University is one of the largest universities in the country where students from different part of the country study. It houses four colleges, eight faculties, five institutes, and four schools. The enrollment of regular undergraduate students in first semester of academic year 2008/09 (2001 EC) is numbered 22409 (Addis Ababa University Registrar, 2009). This makes Addis Ababa University one of the largest in the country. This study conducted in Addis Ababa University focusing

on two campuses namely, the main campus at Sidist kilo and the science faculty campus at Arat kilo.

### **3.4 Research Strategy and Design**

This research is indulged to analyze the added advantage of using multimedia message sources in condom social marketing promotions. It also tries to analyze the effects of risk cognition on condom use frequency. Such research requires gathering primary data from respondents whom the research tried to cover.

To this end the research takes basically a combination of descriptive and relational research formats. While it tries to describe the perception of students towards condom, it also looks at the relationship between multiple media exposure and condom use. Students' perception of risk was also analyzed to identify whether it affects actions (condom use frequency).

A combination of research formats were used in this research. According to Trochim (2004), using a combination of formats helps to describe results better than using a single format. Hence, both quantitative and qualitative research designs were used in this research. The study began with a survey to generalize results according to the responses obtained from the questionnaire. Based on these responses some discussion themes were originated for further focus group discussions. Thus, the use of mixed methods through quantitative survey and focus group discussions would enable the researcher capture better understanding of the research problem. Such triangulation also helps to complement on the analysis and fill the gaps in the findings of the survey.

### **3.5 Population and Sampling Procedure**

This research is limited only to male regular students of Addis Ababa University. Addis Ababa University houses four colleges, eight faculties, five institutes, and four schools. Addis Ababa university run its programs in campuses spread over the city.

It has more than nine campuses that provide both undergraduate and post graduate level education. Most of the campuses also provide education in extension programs. Apart from the extension and post graduates' program, the university has 15758 male and 6651 female regular students in the academic year 2008/2009 (2001E.C). This figure clearly shows that the target group is too large to manage. Studying a whole population in order to arrive at generalization would be impractical, if not impossible, to meet the purpose of a research (Best & Kahn, 2005). In situation like this, multi-stage sampling method is suggested by many research method literatures.

Trochim (2004), for instance, recommends cluster (area) random sampling, a variation to simple random sampling, to get samples in such cases where the target group is dispersed across an area. By using the combination of systematic and simple random sampling methods, sampling layers (stages) would be created so as to reduce the population size and reach to the ultimate sample selection. Thus, areas or clusters would be first selected through systematic or simple random sampling. Then within clusters another smaller units (for e.g. from cities would be selected districts) are selected. The selection will continue to the stage where the researcher reached in selection of the final respondents (Trochim, 2004).

Three layers of clusters were used to select respondents. First, selection of campuses secondly, selection of college/institutes/faculties and finally, selection of respondents was carried out. Accordingly, in this research a cluster sample of two campuses, the main campus at Sidist Kilo and the Science campus at Arat kilo were selected. This was done primarily because the two selected campuses accounted for 43% of the total male regular students of the university. Besides, the two campuses accommodate the two extremes in academic orientations (i.e. between natural science and social science) and this helps to the representativeness of the sample.

There are six Colleges/Institutes/ Faculties in the two selected campuses. Colleges, Institutes and Faculties were given the same level of selection seeing that these

entities directly descend in to departments. However, no emphasis was given to departments because the academic orientations can already been identified as 'social' or 'natural' while the colleges or faculties were selected. Thus, three of them, Institute of Language Studies, College of Social Science and Science Faculty were selected randomly so as to select sample respondents.

**Table 3.1: Sample of Respondents**

<i>No</i>	<i>College/Institute/Faculty</i>	<i>Students</i>		
		<i>N</i>	<i>n</i>	<i>%</i>
1	Institute of Language Studies	1349	135	10
2	College of Social Science	753	75	10
3	Faculty of Science	1489	149	10
	<b>Total</b>	<b>3591</b>	<b>35</b>	<b>9</b>

Table 3.1 indicates the number of students enrolled in the three selected Faculties/Institutes/Colleges and sampled ones from each. Consequently, out of the total 3,591 students of the Faculties/Institutes/Colleges a sum of 359 students (10% of the total) were randomly sampled in proportion to the number of students in each Faculty/Institute/College.

### **3.6 Data Collection Instruments and Procedures**

Within the realm of the aforementioned methods, integration was made to collect both quantitative and qualitative data from the informants of the study. To this end, three types of data collection instruments namely: questionnaire, focus group discussion and in-depth interview were employed. In support of such a triangulation, Best& Kahn (2005) says that each data gathering device has its own particular bias or weakness and there is an added advantage in using a combination of different devices to supplement one another as well as to counter bias on data

collected. Accordingly, these instruments were used in combination so as to gather reliable data and to enhance the plausibility of the findings of the research.

### **3.6.1 Questionnaire**

Questionnaire was used to mainly gather quantitative data. The questionnaire was developed in English language consisting of twenty-nine relevant question items to answer the research questions of the study. The questionnaire was also comprised of a Likert-scale, based on a scale level from “strongly agree” to “strongly disagree”; a multiple-response format, and a “yes” or “no” type of questions. Open-ended questions were also included in the questionnaire to allow respondents express their feelings and personal opinions whenever deemed necessary. While constructing the question items, care had been taken to ensure whether the forwarded questions were simple and unambiguously presented to the respondents. Besides, the researcher tried to remain courteous in asking questions which might be very personal to the respondents. In addition, the purpose of the research was clearly indicated on the cover page of the questionnaire and respondents were also assured about the confidentiality of their responses.

Data was collected spotting respondents in their dormitories. So as to make the students more comfortable in filing out the questionnaire, classroom settings were purposely avoided. Hence, information was first obtained from students’ dean offices of the selected campuses about the type of dorms and the number of students in each dormitory. Though students were not assigned in accordance with their departments and year of study, it had been found out that freshmen students could be easily found in ground level buildings normally referred by students as *Siberia* and *Saba*. In other words, sophomores and seniors took different dorms on a three story buildings in each campus.

Four data collectors were trained and assigned to collect data under the supervision of the researcher. One of the data collectors acted as a coordinator so as facilitate the data collection. The data collectors were senior students who had been active

participants of the university anti-HIV club. This helped the researcher gather reliable data as the students were keen to the subject and enthusiastic to work.

The items of the questionnaire were organized in six main sections. The first section focused on such background information of the respondents as age, field and year of study. Section two was dedicated to assess the media consumption habits of the respondents. In section three, questions about condom advertisement exposure were presented. In section four, different question items were asked to assess the brand awareness of respondents and their perceptions toward condoms. Section five consisted of questions that were requested to measure HIV/AIDS risk perception of respondents. Finally, the respondents were requested to respond on their condom utilization in the last section of the questionnaire.

The questions pertaining condom perception and attitudes towards condom use were coined after referring the condom behavioral indicators of the HIV/AIDS Behavioral Survey Ethiopia (2005) and sexual risk cognition questionnaire of Shah et al. (1997) which is claimed to have a reliability of 0.910 using Cronbach alpha. Questions related to HIV risk perception and vulnerability were also prepared based on the theoretical implication of Protection Motivation Theory.

### **3.6.2 Focus Group Discussions**

Focus group discussion is not uncommon in communication studies, it rather gain more popularity in market research and politics as well (Deacon et al., 1999). Deacon et al. (1999) also states that focus groups can provide “rich qualitative material” suitable enough for detail analysis and interpretation.

The idea behind conducting the focus groups was to further investigate students' reaction about condoms and the promotions through discussions. The focus groups also helps to capture students own views and actions expressed in their own words which otherwise was impossible to get through the questionnaires.

Six focus groups were conducted in the selected campuses. Members of the focus group range from six to eight. Since the groups were researcher-constituted the number of members was limited to reasonable amount so as to minimize nervousness and at the same time stimulate better exchange of views and constructive debate among participants. In these kinds of situation, Deacon (1999) for example suggests participant number per group to be between five and ten. Senior students were purposely made to dominate the focus group members because the researcher assumed that they have had ample college life experience than freshmen and sophomores. Hence, the number of freshmen and sophomores was limited to two in each group. The moderator's role in the discussion was limited only in asking questions and raising issues so as to stimulate further discussions. Participants were free to comment, debate, and exchange their ideas. A digital sound recording was put into operation before the discussions meanwhile the red light of the recorders was covered not to distort the participants' attention.

### **3.6.3 In-depth Interviews**

Along with the responses of the students, in-depth interview was also used to accrue the experiences of those individuals who have been participating in the anti-HIV/AIDS and condom-related campaigns of the university. Accordingly, semi-structured interviews were conducted with members of the anti-HIV club, officers of the African AIDS Initiative Program that functions in the university and with concerned employees of DKT Ethiopia. Due to the fact that these groups of interviewees have been working with students of the university, their experience would have a profound importance to clarify and elaborate points forwarded by the student respondents.

Semi-structured interviews, according to Deacon (1999), "abandons concerns with standardization and control, and seeks to promote active open ended dialogue". However, the researcher raise issues relevant to the research purpose so as to make the interviewees remain in tune with the research objectives.

### **3.7 Data Analysis Techniques**

In line with the research objectives, the data collected through questionnaires, focus group discussions, and interviews were analyzed sequentially. The quantitative data obtained through the questionnaire were analyzed first using different statistical tools with the support of Statistical Package for Social Science (SPSS) 15.0 software. Hence, frequency, count and percentage were mainly used to analyze background characteristics and different answers of the respondents and also to compare and contrast figures. A bi- variate correlation analysis was used to measure the relationship between media exposure and condom use applying Spearman's rho coefficient measure. Spearman's rho coefficient measures are appropriate to analyze relationships in ranked data like that of this research. Similarly, partial correlation analysis was run to further investigate the same relationship after controlling the effects of such demographic variables as age, academic performance and year of study of the respondents. Partial correlation procedure computes correlation coefficients between two variables while controlling for the effects of one or more additional variables.

Protection motivation variables were also analyzed to measure the relationship between HIV risk cognition and consistent condom use. Thus frequencies of cases under each variable were cross validated and compared in relation to condom use frequency of respondents so as to predict the best behavioral indicator.

### **3.8 Ethical Considerations**

While collecting data, data collectors were instructed to consider the major ethical procedures in carrying out survey. Formal permission was obtained first from the respective students' dean offices and campuses securities to meet students in and around their dormitories. The data collectors also got verbal consent from the respondents ahead of delivering the questionnaire. Furthermore, the very aim of the questionnaire was briefed to the respondents before filling out the questionnaire. No any incentive what so ever was given to them.

## **CHAPTER FOUR**

### **DATA ANALYSIS AND INTERPRETATION**

The results of this research are presented in three main parts. The first part, deals with the general characteristics of respondents. The second part presents analysis on the quantitative data followed by qualitative findings. Finally, interpretation of both quantitative and qualitative findings is presented.

#### **4.1 Characteristics of Respondents**

This research is conducted on male students of Addis Ababa University. The researcher believed that this group of the youth, in one way or another, faces the challenges of young age behaviors while they are in college. They are likely to engage in behaviors which are driven by immense emotional responses and peer pressure. Consequently, these boys are most likely to be exposed to casual sex that makes them more vulnerable for HIV and other STIs. Thus, it is reasonable to consider this group of the youth as prominent source of information and conduct this study.

While collecting data, the researcher followed a sequential approach whereby quantitative data was collected through self-administered questionnaire in the first phase. In the second phase, qualitative data was collected through focus group discussions and in-depth interviews. The focus group discussions were carried out in the second phase so as to supplement the data obtained by the questionnaire. Hence, discussion ideas were generated from the responses to questionnaire. Accordingly, the questionnaire was distributed to 360 students of the selected campuses. Out of this total 196 (93.3%) questionnaires from the main campus (Sidist Kilo) were returned. Likewise 140 (94%) questionnaires were returned leaving a total of 23 questionnaires uncollected in both campuses. The general characteristics of the respondents are summarized in table 4.1 as follows:

**Table 4.1 General characteristics of Respondents**

<i>no</i>	<i>Variable</i>	<i>Category</i>	<i>Respondents</i>	
			<i>n</i>	<i>%</i>
1	Age	Below 19 years	72	24.4
		19-21 years	175	52.1
		Above 21 years	89	26.5
		<b>Total</b>	<b>336</b>	<b>100</b>
2	Place of High School	Addis Ababa	26	7.7
		Major Cities	142	42.3
		Others	168	50
		<b>Total</b>	<b>336</b>	<b>100</b>
3	Academic Stream	Social Science	197	58.6
		Natural Science	139	41.4
		<b>Total</b>	<b>336</b>	<b>100</b>
4	Academic Performance	CGPA 2.00-2.50	80	23.8
		CGPA 2.50-3.00	151	44.9
		CGPA 3.00-3.50	89	26.5
		CGPA Above 3.50	16	4.8
		<b>Total</b>	<b>336</b>	<b>100</b>
5	Academic Year	2 <sup>nd</sup> Year	167	49.7
		3 <sup>rd</sup> year	85	25.3
		4 <sup>th</sup> Year	81	24.1
		above	3	0.9
		<b>Total</b>	<b>336</b>	<b>100</b>

In terms of academic stream, the composition showed a comparable number of students involved from the two considered streams. Out of the total respondents, 197 (58.6%) were from social science division while the rest 139 (41.4%) were from natural science stream. This was due to the proportionality in the total number of students in the selected faculties. Categorically, a little more than half of the

respondents were aged between 19 and 21. The mean age of respondents was found to be 21 (range between 18 and 27). Likewise, half of the respondents reported that they have attended high school in smaller regional cities. The cities where respondent completed high school were grouped in to three categories: Addis Ababa, Major Cities, and Other cities. On the basis of population size, all regional government cities were considered as major cities while other places or smaller cities, except Addis Ababa, were categorized under “others”. Accordingly, more than 90% of the respondents were those students who had completed their high school out of Addis Ababa. This clearly indicated that the responses obtained represent diversified views of students who came from different places and who have had different level of experience to the matters addressed in the questionnaire. Conversely, only 26 respondents (7.7 %) have been found from Addis Ababa, the capital. The number of respondents appeared to be low in this case, may be because the data was collected in students Dormitories; and most of Addis Ababa students do not use this service.

With respect to academic performance of respondents, nearly 45% of respondents reported to have CGPA between 2.5 and 3.00. The rest of the respondents' performance spread almost proportionally between CGPA categories 2.00-2.50 and 3.00-3.50 which get a response percentage of 23.8 and 26.5 percent respectively. This shows that the responses obtained relatively comprises the views of students with different academic performance. It was only 16(4.8%) students who score excellent CGPA which was above 3.50. In terms of academic year, nearly 50% of the respondents were 2<sup>nd</sup> year students (which is in this case is to mean 1<sup>st</sup> year in Addis Ababa University but have attended per-college in their stay as preparatory) while 25% were third year and seniors took a percentage of 24%. The reaming 1% were students who lag behind in their studies due to various reasons.

## **4.2 Data Analysis**

The data which had been obtained from the questionnaire, focus group discussion and in-depth interviews was analyzed sequentially. Hence, this section presents the analysis made on quantitative data and then follows qualitative data. The presentation was organized to follow the basic questions of the research.

### **4.2.1 Quantitative Data Analysis**

The quantitative data collected through the questionnaire is presented in isolation or combined manner to ease discussion and presentation.

#### **4.2.1.1 Media Exposure to Condom Promotions**

Exposure to multiple condom promotion messages was measured by counting the number of media sources in which students recall messages on. Hence, respondents were first asked whether they saw, heard or read a condom promotion message, at least in a period of one year. They were also asked whether they recall the promotion message and to indicate the medium in which they saw that message. The recall of the condom promotion messages by media type is summarized in table 4.2 as follows:

**Table 4.2 Exposure to Condom Promotion Messages by Media Type**

No	Type of Media	Response					
		Yes		No		Missing	
		n	%	n	%	n	%
1	TV	261	77.7	75	22.3	-	
2	Radio	241	71.7	94	28	1	0.3
3	Newspaper	82	24.4	253	75.3	1	
4	Magazine	68	20.2	268	79.8	-	
5	Poster	122	36.3	214	63.7	-	
6	Leaflets	51	15.2	285	84.8	-	
7	Billboard	125	37.2	214	62.8	-	
8	Digital Display(Sonic Screen)	39	11.6	296	88.1	1	0.3
9	Other Media	38	11.3	398	88.7	-	

As shown in the table 4.2, those condom promotions on TV have got a very large recall percentage of nearly 78% of total respondents. Following TV, radio and billboard advertisements got a recall percentage of 72 and 37 respectively. Predominantly, those advertisements on TV and radio appear to have a widespread reach than any other media. This was found to be related with the intensity of the promotions carried out by DKT Ethiopia in the year ended Dec, 2008. The available information for example showed that in that particular year more than 33 thousand TV and outdoor digital display (sonic screen) spots were used to advertize the condom brand *Sensation*. Thus TV and radio appear to be the leading media in giving students information about condoms.

#### **4.2.1.2 Brand Awareness and Preference**

When it comes to assessing the brand awareness of DKT Ethiopia products, respondents were given the names of the three brands of condoms that are socially

marketed by DKT Ethiopia and asked if they knew these brands. Consequently, they were also asked to name their preference and to state their reason as well.

**Table 4.3 Level of Brand Awareness among Respondents**

<i>No</i>	<i>Brand Name</i>	<i>Responses</i>			
		<i>n*</i>	<i>%**</i>	<i>Percent of Cases</i>	<i>Rank</i>
1	<i>Hiwot Trust</i>	265	39.0	80.3	2
2	<i>Sensation</i>	293	43.2	88.8	1
3	<i>French Feelings</i>	121	17.8	36.7	3
	<b>Total</b>	<b>679</b>	<b>100</b>	<b>205.8</b>	

N336, valid=330(98.2%) Missing= 6 (1.2%)

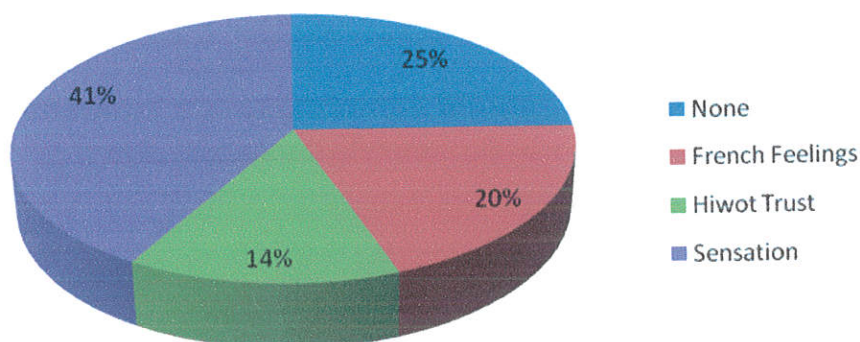
\*Number of respondents who know the Brand of condom advertised

\*\*The percentage of total cases represented by each brand of condom

Table 4.3 shows that almost 89% of the total respondents (n=330) have identified the condom brand *Sensation*. Similarly, 80% of the same numbers of respondents said that they knew the condom brand *Hiwot Trust*. A little more drop in brand awareness level was observed for *French Feelings* which has got a brand awareness percentage of 36.7.

The same level of rank order of brand awareness of the respondents can be alternatively analyzed by considering the percentage of respondents who knew each of the brand names represented. Hence *Sensation* was widely recognized by respondents taking 43% while *Hiwot Trust* and *French Feelings* got 39% and 17.8 % respectively. The data in table 4.3 also indicated that all respondents have identified (knew) at least two brands of condom that DKT Ethiopia promotes.

So as to assess respondents' attitudes towards their condoms preferences, they were asked to select their favorite brand and state their reasons. The results can be summarized as follows:



n=336, valid=335 (99.7%) Missing =1(.03%)

**Figure 4.1 Brand Preferences among Respondents**

Brand awareness seems to influence preferences. In a similar fashion to that of the brand awareness result indicated above, *Sensation* is found to be the favorite condom than the other two brands. Thus, 41% of respondents prefer to use *Sensation* while 25% prefer *Hiwot Trust* and 20% prefer *French Feelings*. 14% respondents said that they do not prefer all the three brands at all. Most frequently mentioned reason for brand preference was related with the condom appearance and package. Flavor and price were other reasons that shape preferences. In addition to this pharmacies and health centers were the two major access of condom (27% and 26%) to respondents followed by kiosks (16%). A considerable number of respondents (9%) also said that they get condoms from their friends.

#### **4.2.1.3 Respondents' Attitudes towards Condoms**

Students' attitudes towards condoms were measured mainly by putting a set of propositions about condoms. These propositions were common condom biases usually used to assess attitudes towards condoms. A number of statements can be drawn to assess people's attitudes towards condoms. However in this research four major propositions were selected after referring the MOH Behavioral Surveillance

Survey (2002) indicators about condoms and DKT Ethiopia leaflet which tries to avert prejudices about condoms. The propositions were forwarded in a four level Likert Scale question format so as to measure the common bias among students. The frequency of respondents' response is summarized and averaged to rank those prejudices about condoms.

**Table 4.4 Attitudes of Respondents towards Condoms**

Items	Strongly agree		Agree		Disagree		Strongly disagree		Mean	Mean Rank
	No	%	No	%	No	%	No	%		
condom decrease sexual pleasure	47	14.5%	132	40.7%	90	27.8%	55	17.0%	2.53	2
condom encourages the youth to promiscuousness	94	28.8%	105	32.2%	76	23.3%	51	15.6%	2.74	1
cheap condoms have poor quality	27	8.3%	29	8.9%	143	44.0%	126	38.8%	1.87	4
condoms are for sex- workers and infidel people	47	14.5%	59	18.2%	96	29.5%	123	37.8%	2.09	3

As it is indicated in Table 4.4, increase in agreement level was largely observed when it comes to the issue that "condom decreases sexual pleasure" and "condom encourages the youth to promiscuous sex". Thus, it was found out that 61% of respondents agree that condom encourages the youth to practice more sex. Furthermore, nearly half of these respondents showed their strong agreement to the same statement. In similar fashion, 55% of respondents have also affirmed that condom decreases their sexual pleasure. However, significant number of respondents did not associate condom prices with quality. Accordingly, 83% of respondents have showed their disagreement to the proposition which says "cheap condoms have poor quality". Significant number of respondents also showed their disagreement when they were asked whether condoms are made for commercial

sex-workers and infidel people. The responses to this item was found out to be 67% for disagreement while the rest 33% was for agreement.

#### 4.2.1.4 Multiple Exposure and Condom Utilization

In order to assess the relationship between multiple message exposure and condom utilization, respondents were asked whether or not they saw/read/heard a condom promotion message of DKT Ethiopia in a period of one year. Then they were again asked to name the medium in which they saw or heard that message on. The number of media source was then taken as a substitute to measure the intensity of message exposure. This was later correlated with current use of condoms. Whether respondents used a condom at last sexual intercourse was considered as current condom use.

**Table 4.5 Level of Media Exposure and Condom Use**

Number of media source	Used condom in last sexual intercourse				Total	
	Response					
	yes		no		n	%
	n	%	n	%		
1	18	31.03	40	68.97	58	17.47
2	34	45.33	41	54.67	75	22.59
3	51	60.00	34	40.00	85	25.60
4	35	60.34	23	39.66	58	17.47
5	21	63.64	12	36.36	33	9.94
6	8	66.67	4	33.33	12	3.61
7	5	71.43	2	28.57	7	2.11
8	3	75.00	1	25.00	4	1.20
<b>Total</b>	<b>175</b>		<b>157</b>		<b>332</b>	

n=336, valid=332 (99%) Missing =4(1%)

As shown in table 4.5, the number of respondents who have been exposed to condom promotion messages increased till it reaches to three media sources. Out of the total respondents (n=332), 65% have been exposed to a maximum of three

media sources. Conversely, the number of respondents who were exposed to more than three media sources, decreased noticeably afterwards.

When intensity of media exposure cross tabulated with current condom use (table 4.5) the result showed that as the number of message recall increases, current use of condom also increases. This increase showed a markedly difference in current condom use when the level of exposure reach to three media sources. Thus, out of those respondents who recall condom promotion messages on three channels, 60% reported that they have used condom the last time they had sexual intercourse, while 40% did not. Likewise, out of those respondents who were exposed to more than four media sources, 66% have used condom currently as compared to those who did not (34%). Out of the total respondents who used condoms in last sexual intercourse, 49% have been exposed to condom promotion messages through 3 to 4 media sources.

A bivariate correlation analysis was made to assess the relationship between intensity of media message exposure and current condom use. To do so, a spearman's rho coefficient was calculated to see the relationship between the variables.

**Table 4.6 Bivariate and Partial Correlations between Media Exposure and Condom Use**

Correlation Measure			Media Exposure	
<b>Bivariate Correlation</b>	Spearman's rho	<b>Current condom use</b>	Correlation Coefficient	.231(**)
			Sig. (2-tailed)	.000
			N	332
<b>Partial Correlation</b>	Control Variables Academic Year & CGPA of Students & Age	<b>Current condom use</b>	Correlation Coefficient	.219(**)
			Sig. (2-tailed)	.000
			N	332

\*\* Correlation is significant at the 0.01 level (2-tailed)

The Spearman's rho correlation coefficient showed that there is positive correlation between exposure to multimedia source and current condom use. The correlation (.231) was statistically significant ( $p < .01$ ), indicating a linear relationship between the two variables. Meaning as students become exposed to an increased number of condom promotion messages through various media, they were more likely to use a condom. In order to further investigate the positive correlation between the above variables, partial correlation test was also run controlling the effects of the demographic variables age, year of study, and CGPA of the respondents.

Consequently, the partial correlation coefficient between current condom use and media exposure (.219) still indicated a positive relationship, which was a little less than the coefficient found in the bivariate analysis (.231). This relationship was enough to demonstrate the positive relationship ( $p < 0.01$ ) that exists between the two variables even after controlling the effect of the above mentioned demographic variables.

#### **4.2.1.5 HIV Risk Perception and Its Impact on Condom use Frequency**

In order to investigate the relationship between HIV risk assessment (risk cognition) and the motivation to adopt the recommended response (which in this case is consistent condom use), protection motivation variables (severity, vulnerability, response-efficacy and self-efficacy) were analyzed in relation with condom use frequency. Respondents were asked whether they believe HIV/AIDS is a serious disease, to measure severity. The question item "Do you feel you are vulnerable to HIV/AIDS?" was used to assess vulnerability. Likewise, respondents were also asked if they believe that condom can reduce their chance of contracting the HIV virus in measuring response-efficacy. And finally, they were asked if they feel confident to use a condom in order to assess their self-efficacy.

Thus each variable was cross-validated with the frequency of condom use and the frequency obtained in each cross relation was further analyzed as indicated in table 4.7

**Table 4.7 Relationship between Protection Motivation Variables and Condom use**

**Frequency**

Variables	Response	Condom Use Frequency								Total	
		Always		Most of the time		Sometimes		Seldom (Never)		n	%
		n	%	n	%	n	%	n	%		
<b>Severity</b> (HIV/AIDS is a serious/killer disease)	Strongly agree	52	28.7	22	12.2	33	18.2	74	40.9	181	54.85
	Agree	22	26.8	16	19.5	9	11.0	35	42.7	82	24.85
	disagree	4	9.5	6	14.3	6	14.3	26	61.9	42	12.73
	Strongly disagree	6	24.0	3	12.0	6	24.0	10	40.0	25	7.58
<b>Total</b>		<b>84</b>	<b>25.45</b>	<b>47</b>	<b>14.24</b>	<b>54</b>	<b>16.36</b>	<b>145</b>	<b>43.94</b>	<b>330*</b>	<b>100</b>
<b>Vulnerability</b> (Do you think you are vulnerable to HIV)	yes	59	47.2	23	18.4	16	12.8	27	21.6	125	37.88
	no	25	12.2	24	11.71	38	18.54	118	57.56	205	62.12
<b>Total</b>		<b>84</b>	<b>25.45</b>	<b>47</b>	<b>14.24</b>	<b>54</b>	<b>16.36</b>	<b>145</b>	<b>43.94</b>	<b>330*</b>	<b>100</b>
<b>Response Efficacy</b> (using condom decrease my chance of contracting HIV risk)	Strongly agree	44	44.0	21	21.0	18	18.0	17	17.0	100	30.30
	Agree	37	33.6	23	20.9	24	21.8	28	23.6	112	33.33
	disagree	1	2.0	2	3.9	8	11.8	42	82.4	53	15.45
	Strongly disagree	2	3.1	1	1.5	4	6.2	58	89.2	65	19.70
<b>Total</b>		<b>84</b>	<b>25.45</b>	<b>47</b>	<b>14.24</b>	<b>54</b>	<b>16.36</b>	<b>145</b>	<b>43.94</b>	<b>330*</b>	<b>100</b>
<b>Self-efficacy</b> (confident to use condom)	yes	75	43.6	33	19.2	22	12.8	42	24.4	172	52.12
	no	9	5.7	14	8.9	32	20.3	103	65.2	158	47.88
<b>Total</b>		<b>84</b>	<b>25.45</b>	<b>47</b>	<b>14.24</b>	<b>54</b>	<b>16.36</b>	<b>145</b>	<b>43.94</b>	<b>330*</b>	<b>100</b>

n=336, valid=330(98.21%) Missing =6(1.79%)

Nearly 80% of respondents (n=330) acknowledged that HIV/AIDS is a serious diseases. Out of these respondents, 29% have reported they have used a condom in every sexual intercourse, while 41% reported that they seldom/never use a condom. The rest of the respondents' condom utilization was found to be inconsistent. Furthermore, the respondents were also requested to indicate why they did not use condom. Accordingly, the response showed that the foremost reasons were abstinence followed by the reason "I trust my partner". There were

also quite significant students who said that condom is against their religion. When HIV/AIDS severity is further observed in terms of condom use frequency, those who have always used a condom significantly (88%) believe that HIV/AIDS is a serious disease as compared with those who showed their disagreement (12%), in the same category.

When it comes assessing the perception about vulnerability and its impact on condom use frequency, almost 38% of the total respondents think that they feel vulnerable to HIV virus while the rest 62% of them though otherwise. Yet, out of these who believe that they are vulnerable, nearly half of them (47%) have always used condom as compared to those who never/seldom use a condom (22%). According to their responses most respondents' perception of vulnerability was negative because of two main reasons. One was because they believe that they are confident to remain in abstinence. The other reason was because respondents believe that they know how the disease is transmitted and how to avoid it. Few more respondents also mentioned that they use a condom every time so they do not feel they are vulnerable.

Almost two third of respondents acknowledged that condom can decrease the chance of contraction the HIV virus. Likewise, when condom efficacy was analyzed in terms of condom use frequency, out of those who accept condom as a remedy in HIV prevention, 38% of them have always used condom while, condom use frequency decrease comparably between the range "Most of the time" and "never/seldom" . On the contrary, those respondents who showed their disagreement to the statement "using a condom will decrease my chance of contracting the HIV virus and other sexually transmitted diseases" 85% of them have never/seldom used a condom (table 4.7).

Those who have the confidence to use a condom were more likely to use it frequently. Thus, 43% of them reported that they have always used a condom while the rest 32% have either used a condom most of the time or sometimes. The

remaining respondents have never/seldom used a condom (24%). Level of confidence is largely affected by the stigmatization of condom. Accordingly, the responses showed that, those who have no confidence have put 'embracement' and 'partner's disapproval' as their reason. Meanwhile, there were also respondents who said that they have no confidence, because they were not sure about condom's overall efficacy.

So as to analyze the combined effect of the protection motivation variables, cases that fulfill the criteria (positive response to the questions asked in measuring the variables) were filtered out and the frequencies of the cases were analyzed as follows:

**Table 4.8 Combined Effect of Protection Motivation Variables on Condom Use**

Condom Use Frequency	Protection Motivation Variables								Combined effect	
	Severity		Vulnerability		Response efficacy		Self efficacy		n	%
	n	%	n	%	n	%	n	%		
Always	74	28.14	59	47.2	81	40.30	75	43.60	57	49.6
Most of the time	38	14.45	23	18.4	43	21.39	33	19.19	21	18.3
sometimes	42	15.97	16	12.8	42	20.90	22	12.79	13	11.3
Never/Seldom	109	41.44	27	21.6	35	17.41	42	24.42	24	20.9

When the positive responses of each variable (agreement about the HIV severity, vulnerability on one hand, and the acceptance of the remedy and the confidence to use a condom, on the other) was summarized and viewed. Condom use frequency was positively correlated with all variables except for severity and vulnerability. In the two cases, that is response-efficacy and self-efficacy, the frequency of condom use increases, from seldom to always as respondents accept condom as a remedy.

Of those who feel vulnerable, nearly half of them used condom always. However, when it comes to severity, the number of respondents who never/seldom use a condom was greater than those who always use a condom. It is also found out that vulnerability and self-efficacy have best predicted intentions to consistent condom use scoring 47% and 44 % respectively.

But when all the conditions in protection motivation, met, i.e. when respondents believe that HIV/AIDS is serious and feel vulnerable on one hand, and when they believe that condom can decrease their chance of contracting the diseases and have the ability to use it on the other, they were more likely to use condom consistently. Thus, it was interesting to find out that in this combined effect, almost 60% or the respondents who fulfill the above conditions have always used a condom.

#### **4.2.2 Qualitative Data Analysis**

Qualitative data in this research was obtained through focus group discussion, in-depth interviews as well as from the responses to open-ended questions items of the questionnaire. The focus group discussions were held after the collection of data through questionnaire. Hence, the themes of the discussions were derived from the respondents' reactions. The major themes of discussion include student's perceptions about HIV risk, attitudes towards condoms, challenges to condom use, and reactions to condom promotion messages. The researcher believes that the information gathered in the focus group discussions were not only limited to discussants' personal perceptions. Rather, they can be taken as a manifestation of events regarding fellow college students. The reactions of the discussants can somehow reflect on how young college students make sense of condoms and HIV risk. Like in the quantitative research in which multimedia message exposure and some major determinant behavior to condom use were identified, the focus group discussions and interviews produce valuable input.

Six focus group discussions (three in each campus) were held in the selected campuses. Number of discussants ranges from six to eight students. While senior students were made to dominate every group, the number of freshmen and sophomores was purposely limited to a maximum number of two in each group. This was done with the assumption that senior students have more experience and exposure of college life than their juniors.

#### **4.2.2.1 HIV Risk and Condom Perceptions**

Valuable insights were gathered during the focus group discussions. While conducting the focus groups discussions the first theme of discussion raised was about HIV risk and the role of condoms in HIV and STI prevention. HIV/AIDS was believed to be a serious health threat by many of the discussants. When they discussed about its seriousness, some even describe it in terms of its effect on their future. But unanticipated thoughts were also there. The fact that HIV- positive people can live longer using anti-retroviral (ART) medication somehow obscured few to have a different view on its seriousness. "If they can live why can't I?" type of argument was observed by some participants. An intriguing response was obtained in one of the group discussion which amazes even fellow participants. He stated his stand considering sex as a "biological right".

*I believe HIV is a serious disease, but we are created to enjoy sex. Just because the virus is there I should not be denied of sex. So I think condom is the best solution for this.*

Senior student/ Science Faculty

Though HIV/AIDS was considered as a serious health treat by many, discussant vary widely in their appraisal of personal vulnerability. Those who feel confident to remaining in abstinence have stressed that they don't feel they are vulnerable to the disease. Yet, those who feel sensitive to the probability of the virus occurrence said that using condom as a precaution, no matter how, is vital.

It appeared that there was a general consensus that acknowledges the positive role of condoms in HIV prevention. Even those who claim that condom is against their religion did not absolutely reject condoms, but showed their fear that it encourages promiscuousness among the youngsters. For example a Muslim participant underlines:

*I really don't prefer to use condoms as far as my choice is concerned. It is against my religion. My religion does not allow sex before marriage. But look at the situation here in campus. What I see from my friends is quite different. Trying out sex is considered fun or part of college life. If you say no, you will be considered as "Geja", (a slang used to express a conservative behavior) so it is better for one to keep himself safe by using condom.*

Senior student/ Main Campus

Nonetheless discussants started to divide in idea, upon when to prioritize condom use. Some discussants prefer the promotion of abstinence and faithfulness more in the context of religion and cultural values. They claimed that, despite the challenges of adolescent life there are a considerable number of students who wanted to remain abstained. These discussants also pointed out that giving priority to condom encourages those who do not even consider having sex. Students even want to try out condoms because they are eager to know how it feels. So this group put the condoms as the last resort.

Conversely, the majority of the discussion participants did not agree with the above idea. They put their argument taking the situation in the University in to consideration. From these students it can be observed that there is an immense psychological temptation from fellow students in the university. Many students want to secure their share of college adventure. Taking the night over is a common practice. Alcohol and Khat induced youngsters may not even get the chance to take matters in their own hands. Besides, some students even do sex in the campus. So,

these group of participates argue, abstinence for college students is quite challenging. So it is rather important to make condoms more available and accessible. They further stressed that the more things are kept discreet, the more students will be drawn into trouble.

Condom perceptions were also shaped greatly by brand type. Very few students in the discussions fear that subsidized condoms have low quality. So they need to be assured about the quality. Yet, most common perception was associated with brand type than price. *Hiwot Trust* condom for example was not the preference for many of the participants not just because it is sold at lower price. Rather, they underestimate the quality of this brand because it has unpleasant smell and inferior appearance. One participant who had used both brands for example said:

*I don't even think to use Hiwot Trust, it smells bad. I prefer French Feelings condom than others. It is very comfortable. I don't know why they are not made available more than Trust and Sensation.*

Senior Student/Science faculty

The common assumption in marketing, which takes higher price as indicator for a product quality, appeared to be less significant when it comes to condom preferences. Most participants still believed that the price of all the three bands is much lower and affordable because they have been subsidized. This was interesting to find out because students definition of quality condom was much more related to flavor, appearance, and comfort than strength. In other words, the brand with appealing package appearance and flavor was also considered as the efficacious condom. Hence, in most participants' mention of *Sensation* and *French Feelings*, attributes like appealing packages, extra features (to add *Sensation*) and good flavor were raised frequently.

#### 4.2.2.2 Reactions to Condom promotion

In order to complement future message development in condom promotions, discussants were encouraged to give their reaction on the already existing messages. The aim here was to identify the type of information that motivates students. Hence both positive and negative reactions towards the condom promotions were identified.

It was observed in the focus group discussions that there was a tendency to associate condom promotion with sex promotion by some participants. This common myth was also observed in the questionnaire while respondents were giving their reaction to condom advertisements messages. "Use condoms" was often confused with "do sex" especially by those who oppose to endorse condoms as best protection. The common mention of Hayat, the model, in *Sensation* condom promotion was an evident for this. The fact that Hayat was featuring in the promotion of male condom, (according to these participants) increased temptations. In spite of this idea, Hayat have got also a positive reaction by a considerable number of discussants. Hayat had been approved as a good model in drawing the attention of the group of discussants who were in favor of the model.

Discussant also mentioned that they find some of the messages hard to understand. Occasionally, they said there was a mismatch between the intention of the advertisement and the actual message. Most importantly, condom promotions do not show the seriousness of HIV/AIDS. The famous standing motto "value your life" is now becoming very common and the need for a new creative approach was recommended by participants.

Discussants were also urged to complement the already existing promotions giving their own recommendations. Through these recommendations, the researcher was able to identify the type of information that motivates students more. Hence, the recommendations commonly call for the inclusion of information that illustrates the

proper condom use. Humor was another motivating factor observed in the recommendations. Cartoons or some comic actions have been found to be the interests of many participants. The endorsement of condom by celebrities and famous people was also a good motivation for participants. Some participants for example love to see their favorite footballers in condom promotions. HIV/AIDS risk messages that remind the consequences of unsafe sex were another important motivation. To this effect participants recommend involving people living with HIV in condom promotions.

#### **4.2.2.3 Challenges to Condom Use**

With the objective of identifying those barriers to condom use among university students discussant were given the chance to explain some of their experiences pertaining condom use. The very frequently mentioned barrier towards condom use was embarrassment. Quite significantly discussants were hesitant to express their confidence to buy condoms from pharmacies and shops.

*I can tell you my experience; I really got nerves to openly buy condoms. If you ask me that I would do sex with out condoms, my answer is no. But I am always struggling with myself just to but one. So most of the time, it is my friend who bought it for me. I don't know why I got embarrassed to but condoms.*

Senior student/Science faculty

Next to embarrassment, religious belief was another barrier to condom use. Though condom use seems to contradict with religious beliefs, on the contrary, those who showed their conviction to their religion claim that their religion has helping them to remain in abstinence.

The belief that condom undermine sexual pleasure was pervasive. In fact it is radical to generalize that students do not use condom because they feel that it undermine their sexual feeling. Most participants still use condom even if they believe so. Yet,

extreme views were also there. Few completely avoid condom because of the above mentioned reason. Their argument lies in the fact that people can live with HIV virus longer. Another interesting point found out in the discussions was that some students believe that girls do not enjoy sex with condoms than boys. So in order to please their partners they avoid using condom.

#### **4.2.2.4 Interview**

Semi-structured interviews were conducted with two anti HIV club members, a Life talk show coordinator, and the monitoring and evaluation officer of the African Aids Initiative International (AAII). These individuals have directly involved in project activities that focus on HIV prevention in the camps. The interview mainly aims to gain the experience and challenges of the interviewees while they were working in the campus. Focus was also given to condom and condom use in order to keep the interview in track with the research objectives. African Aids Initiative International (AAII) started its program in 2004 after it signed a memorandum of understanding with Addis Ababa University. Its program mainly focuses on HIV/AIDS prevention including giving care and support and conducting researches. Likewise, the students' anti-HIV clubs work under the supervision of dean of students' offices of the corresponding campuses. The anti-HIV clubs also closely work with Africa Aids Initiative International.

The AAII monitoring and evaluation officer mentioned that the main project objectives of their program are to encourage university students to Abstain or remain faithful. However, this has been quite a challenge so far. She further elaborates this saying:

*We [AAII] mainly encourage students to abstain or being faithful. This is our objective. However directing students towards this objective is very challenging. ... Some students have already started sex while they were in high school. We*

*even encourage these groups of students to re-abstain. But the reality is quite different. That's why we promote consistent condom use side by side.*

In terms of behavioral influence Emebet, the monitoring and evaluation officer, also mentioned that students develop different behavior while they are in campus. Though it is difficult to make generalizations, students especially from rural areas were likely to be influenced easily for better or worse. For example Emebet continues, in trainings and workshops, students from rural areas show great interest and participation than those from urban areas. On the contrary these students were also observed attempting risky behaviors too. The Life Talk Show coordinator Gulbet also complement on this idea. He mentioned that Addis Ababa is a big cosmopolitan. Even those students who came from regional cities find themselves in a dilemma. These students are keen to show that there are modern and in style. Most of all, Gulbet, says that there is a deep rooted mythology in which students strive to secure their share of college life adventure. Having relationship with fellow girls, going out and partying, trying alcohol, Khat and Cigarettes are commonly considered as adventurous and smart. Furthermore, students want to have something to talk about when they go back to their own places. Perhaps, some have already been predisposed by what they heard from their seniors or former students.

The HIV club members also indorse condoms as a realistic prevention strategy for university students. Even though abstinence and faithfulness are better, experience showed that these methods have been difficult to make real. So the club members give equal importance to condom promotion organizing different events. In the events condoms are depicted in different formats such as pendants, earrings etc to draw attention. These events help not only to reduce the stigmatization towards condoms but also motivated students to attend more events.

The one thing commonly mentioned by the interviewees was that there exists a universal awareness about HIV/AIDS and condoms among students. Though

HIV/AIDS awareness appeared to be universal among students, the level of awareness is still fall short of bringing behavioral change. Awareness has its own common problem. Some students simply ignore information on HIV just because they feel the information is trivial and common. Others insist they that they know what they need to know about HIV. Kehulu the anti HIV club chairman from science faculty for example tells his experience:

*We can say that students are informed about the importance Condoms. But I doubt that this information is equivalent to a knowledge that produces the necessary skills. Once, I tested a student who claimed that he knows how to use a condom. Though he used a condom before, he never checks the expiry date and the air inside the package. Later he told me that he had once a broken condom.*

So there exists a need for intense and systematic information and communication about HIV/AIDS either to change or reinforce students' knowledge.

Likewise in the focus group discussion the challenges to condom use were related to the stigmatization of condoms. As mentioned by the interviewees, students were easily accessing condoms from AAI office off working hours. The experience where by condoms were made available outside the school clinic also tells the same story. But this access is not available currently. Though, a growing number of students started to take condoms overcoming embarrassment (inside AAI office and the school clinic) condom consumption decreases when compared to the previous situation in which condoms were made easily accessible.

The AAI and the students' anti-HIV club experience showed that new approaches in which students are encourages participating gain momentum in time. Thus, the interviewees strongly recommend the need to intensify interventions which focus on peer education. Trained peer educators have been doing a good job in channeling the flow of condoms to fellow students. Students can easily access condoms form these peer educators in dormitories without shame. The Life talk show a program

which encapsulates both entertainment and education is a new approach in communication. This according to, Gulbet one of the organizers, is encouraging more students to participate and share different issues on HIV/AIDS and other related topics. In addition to this, events like fashion shows, coffee ceremonies, and culture days gain students attention easily. However, Kehulu the chairman mentioned, organizing these events need time and resource which in this case are in short supply.

#### **4.2.3 Qualitative and Quantitative Data Interpretation**

This section of the research presents the interpretation of both quantitative and qualitative data.

##### **4.2.3.1 The Promotion, Brand Awareness, and Preference**

Social marketing interventions that promote condom, like that of DKT Ethiopia, use different forms of communication so as create awareness and availability a product. The promotions can be said successful in terms creating awareness. As it was found in the analysis, there is a universal awareness to DKT Ethiopia's brands of condoms. Brand awareness has corresponded with the intensity of the promotions and this in turn affect preferences. Hence *Sensation* is the most promoted brand and at the time it is well known and preferred by many students. So it can be claimed that promotion intensity has its own impact in creating awareness of the products. Awareness in marketing communication is the first necessary step that enhances consumption (Belch & Belch, 2001). Thus, According to Belch & Belch, repetitive promotions are the necessary condition for awareness creation. Awareness as cognitive process helps consumers to develop knowledge. This knowledge in turn affects attitudes; and positive attitudes are the ones that lead to preference. Preference is then lead to trial or consumption of that particular product. In this case, the intensity of the promotion together with the appealing package and flavor of the brand *Sensation* helps students to develop positive attitude towards this brand. That's why it is preferred more than the other two brands.

When it comes to the media in which condoms have been promoted, TV and Radio have a far greater reach than any other media. This is not as such a strange phenomenon. The very nature of these media, can make information dissemination possible far greater than other forms. Besides, these media were mostly used for news and information by respondents. It is rather interesting to find out that billboards can be good channels in condom promotion. Those condom promotions on billboards have got a third rank in recall percentage. Thus big billboards on major highways can be constant reminders of condoms.

When condom attitude is generally viewed, common condom misconception was greatly observed among non-users than users. For example non-users largely believe that condom encourage promiscuousness even though they endorse condoms as the last report. However, the attitude that “condom decrease sexual pleasure” was very common among both users and non users. It is also found out that both in the questionnaires and in the focus groups, most respondents do not associate price with condom quality. This can be taken as advantage for the social marketing program of DKT Ethiopia. At least students viewed that condoms are sold at low prices because they are subsidized, not just because they have inferior quality. Though this perception seems to contradict the common marketing matrix (i.e. price determine quality), its effect on consumption is less significant among male students of Addis Ababa University. A study on condom perception among South African university students, for example revealed that condom perception was associated with brand preferences and price. Thus, South African students perceive that subsidized condoms brands are “smelly” and “infectious.” These types of condoms were also associated with lower class and status (Mulwo et al., 2009).

#### **4.2.3.2 Exposure and Condom Consumption**

In the above section it has been stated that the intensity of condom promotion has its own positive impact in creating awareness and preference. This section explores the relationship between exposure to condom promotion messages and condom consumption. The association between exposure to multimedia source of

information about condoms and the condom use has been acknowledged by numerous body of literature. The results in the research have also revealed this situation. When multiple sources of information are involved in the promotions, they are more likely to influence male students of Addis Ababa University to use condom. Thus, those who recall messages through various media were more likely to use condom than those who recalled fewer messages. Both in the bivariate and partial correlation relations, the coefficient measures showed a positive statistical correlation ( $p < .01$ ) between message exposure and condom use.

However, when this relationship is compared with other research finding, it was found to be less significant. For instance, Jato et al. (1999) in Tanzania found out that contraceptive prevalence rises sharply when recall of messages increases. Thus, when exposure was at the level of one media, contraceptive use was only 9%. When exposure reached to six media sources, consumption was on its climax, reaching 45%. The multivariate analysis in Jato et al. (1999) research also indicated that women who were exposed to six media sources were 11 times as likely as women who recall no media message to be using modern contraceptive methods. Likewise, Bessinger et al. (2003) have revealed that those women who were exposed to two or more media messages were six times as likely as those who do not recall any media source to be using condoms at last sex.

In both the above researches it was possible to compare condom and contraceptive consumption, in terms of those who recall and those who did not. But in the case of this research all respondents have at least recall condom promotion message through one medium. Thus, the effect of exposure was only seen in terms of an increased number of message recalls.

When the effect of exposure was generally viewed we can still say that multiple sources reinforce one another and help individuals adopt a certain behavior. Each type of channel has its own strengths and weaknesses. Mass media channels can reach large audience but they are less likely to encourage participation. While

interpersonal channels help clients to learn new skills, community based channels like public meetings, make participation possible (Salem et.al, 2008). So, exposure through various media must have helped those students who reported increased number of recalls to use condom.

Repeated exposure in consumer consumption behavior for example does not necessarily produce attitude change. It rather results in “subtle changes in the consumers’ knowledge structure” like learning about brand name, or the associated slogan. But, this information later can triggers consumption (in this case condom use) and the consumer then form an attitude towards that product after his experience (Belch and Belch, 2001).

Thus, those who have been exposed to multimedia messages have a greater chance of getting different information about condoms. In the focus group discussions for example it was stated by one participant that he learnt about the type of quality test a latex condom has to pass, on a DKT Ethiopia’s Leaflet. So the effect of exposure to DKT Ethiopia’s condom promotion messages can be viewed both in terms of creating awareness and consumption. The “more is more” claim in the does-response media effect theory is therefore holds true in this particular case.

It is not however entirely, the effect of exposure that produces the desire level of behavior change. Behavior as a process is complex and need the consideration of other parameters. It is quite beyond the capacity of this research to address all that. But at least in this research the effect of risk assessment on condom utilization frequency was investigate.

#### **4.2.3.3 HIV Risk Cognition and Condom Use Frequency**

Fear is an emotional response to a certain threat. Fear can be a motivational factor which can be used in behavioral change communication (Martel, 2001). The impact of fear in protection motivation theory is therefore mediated by such variables like

severity, vulnerability, response- efficacy and self-efficacy to predict peoples' change of a behavior.

In this research, condom use frequency was viewed in relation to protection motivation variables. Accordingly, these variables have been found to predict consistent condom use. As the analysis shows, those who affirm the seriousness of HIV/AIDS and feel vulnerable, were more likely to use a condom always when they feel that condom can decrease their chance of contracting the virus. And, at the same time, when they have the confidence to use it. The combined effect of the variables in the analysis showed this fact. But when the effect of each variable is viewed independently, those who believe that HIV/AIDS is a serious health threat either used a condom always (28%) or did not use a condom (41%). This is the only exceptional case in which the predictor variable (severity) did not correspond to frequent condom use. However, as it can be inferred from the respondents' response as to why respondents did not use a condom, the majority answer was abstinence. So the effect of severity may have encouraged students either to use a condom or remain in abstinence (which is also another recommended remedy in HIV prevention).

Vulnerability has been found as the best behavioral indicator to consistent condom use in this research. Out of those who believe that they feel vulnerable, 47% have always used a condom. This indicates that there would be a good chance of behavioral influence if future communications teach students about conditions that increase a chance of HIV infection. Likewise those who have the confidence to use a condom are more likely to use it frequently. Thus, the data showed that self-efficacy was also another important behavioral indicator to consistent condom use. Hence, out of those who are confident to use a condom 43% have always used a condom.

Achieving self-efficacy has its own challenges. Chaya, Amen and Fox (2002) for example mentioned that lack of skill on how to use condom properly can affect self-confidence. Embracement and lack of condom use skill were also the two main

reasons that hinder respondents their self-confidence. Likewise, in the focus groups, discussant urged the inclusion of information on proper condom utilization. The focus group discussion also revealed that there is still a challenging social norm (which stigmatizes condoms) and this had affects their confidence to buy condom in public.

In general the results of this research go according to the theoretical implication of protection motivation. Those who have showed higher level of HIV/AIDS risk assessment (severity and vulnerability) were more likely to use a condom frequently than those who don't. Similarly those who feel that condom can decrease their chance of contracting the HIV virus also used condom more frequently than those who believed otherwise.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

This chapter presents the conclusion drawn from the findings in the data analysis. It also forwards further recommendations to future message development.

#### **5.1 Conclusion**

An attempt has been made in this research to investigate the relationship between multimedia message exposure and condom use. It has also assessed the impact of HIV/AIDS risk cognition on the frequency of condom use among male students of Addis Ababa University. In order to achieve these objectives, and arrive the conclusions coming forth, it took DKT Ethiopia's condom social marketing promotions as a context.

It was clearly found out that, male students of Addis Ababa University knew at least two of the brands of condom among the currently available brands regardless of their condom usage. Out of the total respondents (n=330) 89% have identified the condom brand *Sensation*. Similarly, 80% of the same numbers of respondents say that they know the condom brand *Hiwot Trust* and 37 % know *French Feelings* brand. Therefore, it can be concluded that, the multimedia condom promotions have contributed in creating awareness of the condom brands that are socially marketed.

The intensity of the promotion also corresponds with the preferences of the students. For instance, *Sensation*, the most promoted condom, is the most recognized and preferred brand. Thus, the repetitiveness of the promotions has its own significance in shaping preferences other than creating product awareness.

Students' perception of good condom was much more associated with appealing package and flavor than price or strength. Besides, the belief that condom decrease sexual pleasure and encourage promiscuous sex was pervasive among male students.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

This chapter presents the conclusion drawn from the findings in the data analysis. It also forwards further recommendations to future message development.

#### **5.1 Conclusion**

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A theory based analysis showed that there was a correlation between message exposure and the actual condom use. The dose-effect analysis has confirmed that, when students were exposed to an increased number of condom promotion messages via different channels, they were more likely to use a condom. A significant difference in condom usage was observed when the level of exposure reaches to three media sources. As a consequence, out of those respondents who recall condom advertisement messages on three channels, 60% reported that they have used a condom at last sexual intercourse and condom use increased afterwards as number media source increased. Both the bivariate and partial correlation association measures showed a statistically positive relation between message exposure and condom utilization. Hence, from the findings in the analysis it can be fairly inferred that multimedia message sources in condom social marketing are much better than fewer or limited channels to influence the behavior of male students of Addis Ababa University towards condom use

Besides, multimedia message sources supplement each other and give additional information about condoms. This additional message advantage was more likely the cause for those students to know more about condoms and ultimately use them. Multimedia promotions like that of DKT Ethiopia use different formats on different media. For example, the TV and Radio promotions focus on brand image building while those messages on leaflets and posters give addition information on condom use procedures. Leaflets also used to avert those common biases about condom. In addition to this, multimedia message sources also increase the reach of the intended audience. Hence, condom promotions through various media have significant contribution to increase condom use among male students of Addis Ababa univesity.

Consistent and appropriate condom use is essential to prevent the sexual transmission of HIV/AIDS. To this end the effect of HIV risk cognition was viewed in relation to condom use frequency. HIV risk assessment was also a motivational factor for consistent use of condoms. The cross-relation between the variables in

protection motivation theory (severity, vulnerability, response efficacy and self-efficacy) showed that those who have reported high level of HIV risk cognition were more likely to use condom frequently than those who reported low level of HIV risk cognition. The intention of students to use a condom consistently was therefore mediated by their appraisal of HIV/AIDS as a threat and their appraisal of condom as a remedy. It is therefore observed that when higher threat appraisal or higher level of risk cognition (severity of HIV/AIDS and vulnerability) followed by higher coping appraisal (the ability and willingness to use a condom) increased the intention to perform the recommendation which in this case is consistent condom use.

Consequently, risk appraisal was found to be as a good motivational impetus to consistent condom utilization. Therefore it can be concluded that emphasizing HIV risk in the promotions has its own importance in motivating male students of Addis Ababa University towards adopting consistent condom use.

The intention of the respondents to use a condom was also best predicted by their assessment of vulnerability to HIV virus and their self confidence to use a condom. Though, most respondents do not feel vulnerable to HIV/AIDS, those who feel susceptible to the virus showed higher intention to use a condom frequently. The same is also holds true for self-efficacy.

It is therefore enough to conclude that the behavioral intention of students to protect themselves from HIV/AIDS had been predicted by the claims of protection motivation theory. Hence fear appealing messages in condom promotion can be a good impulse to motivate male Addis Ababa university students to use condom. Condom promotions that communicate low level of risk are less likely to be effective because they fall short of motivating students by stressing the negative consequences of unsafe-sex. This has also been confirmed in the focus groups. Most students do not associate risk in the existing condom promotions messages.

Maximizing only on messages that stress the seriousness of HIV/AIDS is only the first step. Fear as an emotional response can also trigger negative consequences. Appealing to fear beyond a certain level can result in rejection or denial of the message (Belch and Belch, 2001). However, threatening students with information stressing HIV/AIDS risk and at the same time providing them with information about advantages of consistent condom use can bring better results. In the actual process of message development risk can be explicitly or implicitly expressed.

### **5.3 Recommendations**

After analyzing the relationship between multimedia message exposure and the importance of HIV risk cognition as a motivational factor for consistent condom use, this research gives the following recommendations:

- Continue using different media channels to promote condom. Mass media channels such as Radio, TV, billboards and other Print media are important to insure audience reach in condom promotions. The different forms of channels are appropriate to disseminate different information. This in turn enhances students' knowledge about condoms and shapes their perception.
- In addition to mass media channels, interpersonal channels like peer educators, social events should also be used to promote and distribute condoms.
- Alert students by stressing HIV risk in condom promotions. It is also important to motivate students to use condom by emphasizing the risk of unsafe-sex and the consequences thereto.
- The promotions should also express the likelihood of HIV/AIDS occurrence due to unsafe sex. This can increase students' perception of vulnerability.
- Show and explain the benefits of consistent and appropriate condom use to students.

- Emphasis should also be given on how to increase condom use skills among students. Those who assessed the risk of HIV, are likely to use a condom when they feel that condom is effective and at the same time when they have the self confidence to buy and use it. It is therefore advantageous to invest on communications which aim to increase condom use skills.
- Create messages that focus on the efficacy of condom to prevent the sexual transmission of the virus. Those who feel that condoms are ineffective may not accept them at all.
- Embracement is one of the problems that impede self-confidence among students. Hence, promotions should also focus to avert the social stigmatization of condoms.
- Making condoms more accessible to students (through peer leaders or around dormitories and Toilets) can increase consumption without shame.
- Focus should be given to those intrinsic rewards like, the motivation to be adventures in college and thereby seeking the approval of other and extrinsic rewards such as partner's approval not to use condom. These perceptions are the ones that affect the treat appraisal of students and increase maladaptive behaviors. Future messages therefore, should take this type of perceptions into consideration.
- Interpersonal channels like peer educators and anti-HIV clubs have significant importance apart from mass media channels. Hence supporting these clubs financially and resourcefully is very much recommended.
- Displaying condoms in different ways on Entertainment-education programs such as cultural day events, fashion shows, can reduce the social stigmatization of condoms. Thus, organizing these events in campus helps students to adopt favorable attitudes towards condoms.

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# Appendices

## A-Questionnaire

Addis Ababa University  
School of Graduate Studies  
Faculty of Journalism and Communication

This questionnaire is developed to assess the effects condom promotion messages on male students of Addis Ababa University. Your Participation in this survey is very important to the researcher and is completely voluntary. You don't have to write your name. All your answers will be kept confidential, and only to the research purpose. Completing this questionnaire will take about 15-20 minutes and after you complete filling, give it back to the person who provided you.

### Section 1 Background Information

1. Department \_\_\_\_\_
2. Year of Study  2<sup>nd</sup> year  3<sup>rd</sup> Year  Graduating
3. CGPA between  2-2.50  2.50-30  3.0-3.50  above 3.50
4. You Study High School in  Addis Ababa  Out of Addis Ababa
5. If it is out of Addis Ababa please state the city name \_\_\_\_\_
6. Age \_\_\_\_\_

### Section 2 Media Consumption

7. Which media you use for news and information?

(You can choose more than one answer)

- TV
- Radio
- Newspaper
- Internet

17. Where do you buy condoms?

Pharmacy

Kiosks

Supermarkets

Health centers/Hospitals

Other places (please specify) \_\_\_\_\_

18. How do you rate the following statements about condoms?

	Strongly agree	agree	disagree	Strongly disagree
Condom decreases sexual pleasure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condom encourage the youth to have sex with many people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheap condoms have inferior quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condom is meant for commercial sex workers and to those who are not loyal to their relationship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section 4 Risk Perception

19. Do you agree with the following statement?

	Strongly agree	agree	disagree	Strongly disagree
HIV/AIDS is a very serious (killer) disease which has no cure.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

20. Do you feel you are vulnerable or at risk to HIV/AIDS?

Yes

No

21. If your answer to the above question is no, your reason would be?

Because you are confident that you remain in abstinence.

Because you are confident that you know how AIDS is transmitted and how you can avoid it.

Because you know you use condom every time.

Other reason \_\_\_\_\_  
\_\_\_\_\_

22. Which means of HIV/AIDS prevention is the most realistic way for you?

Condom use

Abstinence

Being faithful

23. Do you agree with the following statement?

	Strongly agree	agree	disagree	Strongly disagree
Using a condom will decrease my chance of contracting HIV virus and other sexually transmitted diseases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Section 5 Utilization

24. Do you feel that you are confident to buy and use a condom?

Yes

No

25. If your answer is no to the above question, you are not confident because?

You are embarrassed to buy condoms.

you don't know how to use a condom properly.

your partner might not be willing to use a condom.

Other reason (please specify)

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26. Have you used a condom the last time you had sex?

Yes

No

27. If your answer is No to the above question your reason could be:

Because you trust your partner you are faithful to her.

Because you think condom undermine sexual pleasure.

Because using condom is against your religion.

Because you were in difficult situation (drinking alcohol for e.g.).

Other reason please specify

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28. You use a condom basically because:

You feel that you might be at risk to HIV.

You want to avoid pregnancy.

You want to protect yourself from other sexually transmitted infections.

Other reason (please specify)

---

29. How frequently do you use a condom

Always

Most of the time

Some times

Seldom/ never

## **B-About DKT Ethiopia**

DKT Ethiopia is a subsidiary country program of the DKT international. The acronym DKT stands for the initials of Dhendra K. Tyagi, the Indian who dedicated himself for the success of his country family planning program. DKT Ethiopia is a registered NGO under the ministry of Justice and works closely with Disaster Management and Food Security Sector (DMFSS) and the Ministry of Health.

According to DKT Ethiopia (DKT, 2009), the social marketing program of DKT Ethiopia started in February, 1990. In collaboration and coordination with national, regional and district health officials, government and non-government authorities, DKT Ethiopia runs its programs with funds obtained from USAID, Royal Netherlands Embassy and others. DKT Ethiopia aims to increase contraceptive prevalence and reduce the sexual transmission of HIV/AIDS. Hence its social marketing program is composed of training health care providers (both public and private), media communication and promotion of its products, development and distribution of IEC materials to change people's behavior and sales and distribution of its products such as contraceptive pills and condoms.

DKT Ethiopia uses intense mass media campaigns to make the public aware of its products, their availability and affordability. DKT also provides training for health care providers in collaboration with the Ministry of Health. These trainees help to educate the rural population about contraceptives and AIDS prevention methods. DKT Ethiopia hopes to expand its program by making available more product choice for family planning and AIDS prevention.

ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
FACULTY OF JOURNALISM AND COMMUNICATION

**Multimedia Condom Promotion, Protection  
Motivation and Condom Use among Male  
Students of Addis Ababa University**

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by  
Demissew Bizuwerk

September, 2009  
Addis Ababa