ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
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KNOWLEDGE, ATTITUDE AND BEHAVIOR OF BLIND AND DEAF STUDENTS ABOUT HIV/AIDS PREVENTIVE MEASURES: THE CASE OF SOMESELECTED SCHOOLS IN ADDIS ABABA

By:
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Abstract

This study investigated knowledge, attitude and behavior on HIV/AIDS among blind and deaf students in primary school of Addis Abeba City administration. Eighty-Four respondents participated in the study. The research adopted a descriptive survey research design. Eighty-Four students (40 blind and 44 deaf) participated in the study. Four hypotheses were postulated and tested. The main instrument use to gather data was HIV/AIDS Education inventory with reliability coefficient of 0.83. Student t-test methods at alpha level of 0.05 were used to analyze the data collected. The findings revealed that there were no significant differences in knowledge and behavior about HIV/AIDS prevention on blind and deaf students. On the basis of the positive outcome, the study further recommended some ways of improving the effectiveness of HIV/AIDS Education to be able to achieve the desired result among blind and deaf students.

CHAPTER ONE

Introduction

1.1. Background to the Study

Ethiopia, Ministry of Health, Annual Performance Report of HSDP-III, EFY2001, (2008/2009)students are plagued with social and moral corruption ranging from gender-based violence and substance abuse (alcohol and khat) were considered as factors that worsen the spread of HIV among certain groups. The causes have been traced to loss of values, rapid urbanization, modernization, economic depression, acculturation, parents' lust after wealth and non-inclusion of a well defined sexuality education in the curriculum. The effects of all these, according to Federal Ministry of Health, (2007), would lead to uninformed or misinformed students. The health implication on this productive group may be devastating.

In recent times, HIV/AIDS believed globally to constitute a health hazard has a high incidence among students. Human Immunodeficiency Virus (HIV) infection is a profound immune dysfunction that allows for opportunistic infections in Acquired Immuno Deficiency Syndrome (AIDS) patients. Acquired Immunodeficiency Syndrome (AIDS) has become a major global public health issue since its discovery in 1981 (Osowole & Oladepo, 2001; Fakolade, Adeniyi, & Tella, 2005).

UNAIDS (2006) reported that an estimate of 25 million people have been killed worldwide since HIV/AIDS was first discovered in December 1981. In Ethiopia also, the infection has continued to spread steadily since it was first diagnosed in 1986. The current national HIV prevalence is 1.2 % (2.8% for female, 1.8% for male, 7.7% for urban and 0.9% for rural). Currently, there are a total of 1,116,216 adults and children living with the virus, 128,900 new HIV infections (53.2% female), and 134,500 AIDS deaths (54.5% female). More than 94.4% of PLWHA, 95.2% of new AIDS cases, 95.3% of AIDS deaths and 95.1 HIV positive pregnancies are estimated to be found in Oromia, Amhara, Tigray and SNNPR. There are more than 7.7 million persons with disabilities-physical, sensory, intellectual or mental impairments in the country (WHO, UNICEF,

2009). The rapidly spreading HIV/AIDS epidemic is one of the most serious challenges to human development and to the country's. The consistent and alarming growing rate among youths especially students with and without disabilities point to the fact that students are sexually active and often take risks with little reflection on the consequences (Fakolade, Adeniyi, & Tella, 2005). Unfortunately, majority of these young adults' especially blind and deaf students are grossly ignorant of consequences of unprotected and unguided sexual activity. This may be due to break in communication and information.

Already, in schools many awareness campaigns have been carried out to intimate the youths of the impeding danger of risk sexual behavior. The campaigns have majorly centered on students without disabilities (Fakolade, Adeniyi, & Tella, 2005; Osowole & Oladepo, 2001). The students with disability especially blind and deaf population is seriously at risk and stand double jeopardy in relation to information and education on HIV/AIDS (Ademokoya & Oyewumi, 2001).

Research by Bisol, Sperb, Brewer, Kato and Shor-Posner (2008) on HIV/AIDS knowledge and health-related behavior of students with hearing and deaf students indicated wide differences in health-related attitude and behavior. The deaf student participants were found to be sexually abused and large numbers of female deaf students have AIDS infected friends. A similar revelation was made by Osowole and Oladepo (2001) in their study on knowledge, attitude and perceived susceptibility to AIDS among 304 secondary school deaf students. The result revealed a high level of awareness of HIV/AIDS with demonstrated gap in knowledge of causation, transmission and prevention coupled with low attitudinal disposition. Bekele (2008) and Groce, Yousa Fzai and Van-der Mass (2008) also found that deaf students have low knowledge of the spread of sexually transmitted infections especially HIV/AIDS. Fakolade, Adeniyi, and Tella (2005) in their study recorded similarity in the awareness of HIV/AIDS by students with hearing and deaf but discovered a wide gap and disparity in knowledge about HIV/AIDS transmission or spread.

However, Doyle (1995) surveyed AIDS knowledge, attitude and behavior among college deaf students found high and moderate in knowledge and attitude respectively among the participants. The result of this study was not enough evidence for generalization, but the causes of the poor knowledge, negative attitude and unhealthy decision making were generally linked with societal

perception and neglect as regard dissemination of vital information. The special-needs students, especially those with deaf, unlike non special-needs individuals, acquire less information from sources such as books, casual conversation and television (Ademokoya & Oyewumi, 2004). This is because they experienced some challenges in internalizing verbal language and often confuse some human activities on electronic media because of their auditory dysfunction. Therefore, they have unmet needs as regarding these sources.

Akinyemi (1998) noted that the deaf students inability to hear and speak often make it very difficult to disseminate sex information to them. This impediment stems out of the fact that most technical and scientific languages to be used have no sign language representation. The consequence is that they are heavily burdened in terms of acquisition of information about sexuality and hence engage in risky sexual behavior. An inherent danger in this unfortunate development is that the uninformed, misinformed or insufficiently informed deaf students who continue to go on having unprotected thoughtless sexual adventures would continue infesting or spreading the yet-to-get-cure disease, AIDS.

In the case of blind students there is no statistical information about the actual number of HIV/AIDS infected blind individuals and to what extent they have reduced risky behaviors of HIV/AIDS infection. This is a very disturbing phenomenon, for these groups of individuals are ignored in the increasing spread of HIV/AIDS, which at the present the only feasible means to prevent oneself from being infected is through information (knowledge). As a matter of fact, the education of HIV/AIDS for blind student is deprived by different factors, which are odd only for these groups of individuals. Reviewing these factors is important partly because it helps to assess to what extent they affected the knowledge level of these individuals. The undergoing discussion, therefore, is concerned with these ends.

The documentary evidence of casual sex, teenage pregnancy, and the rising incidence of sexually transmitted infections (STIs) and HIV/AIDS among students is an indication that there is a need for a formalized program on sexuality and sex-related issue among students (Falaye & Moronkola, 1999). Such program must be the one that will empower the students the necessary skills and information that will positively affect their sexual health.

The incorporation of HIV/AIDS Education to schools at all levels in Ethiopia is a program that aims at development of skills, acquisition of knowledge and promotion of right attitude and decision making among students generally. This is reflected in curriculum contents and strategies for programmer dissemination as packaged in the blueprint.

HIV/AIDS Education is a planned process of education that fosters the acquisition of factual information, formation of positive attitudes, beliefs and values as well as development of skills to cope with biological, physiological, socio-cultural and spiritual aspects of human being (Ministry of Education, 2015). In essence, HIV/AIDS Education will teach knowledge of self and family living respect for self and culture as well as the right kind of behavior in students.

The main goal of HIV/AIDS Education as enunciated in the blueprint is to promote preventive education by providing learners with opportunities to develop a positive and factual view of self, acquire the information and skills needed to take care of their health. The curriculum of HIV/AIDS Education is also designed to teach students how to respect and value themselves and others, and acquire the needed skills to make healthy decision about their sexual health and behavior.

Although, HIV/AIDS Education has been introduced into school curriculum in Ethiopia, its effectiveness has not been fully explored. This study therefore investigated the effectiveness of HIV/AIDS Education as it affects knowledge, attitude and decision making of blind and deaf students in the wake of the irregular spread of HIV/AIDS.

1.2. Statement of the Problem

Obviously, students are vulnerable to so many vices in the society. One of such is unprotected sexual activities that have accounted for the spread of HIV/AIDS worldwide. The reason can be adduced to dramatic change in societal value due to modernization and economic depression. Apart from the universal predisposing factors, blind and deaf students are further plagued with limited and or inadequate information about HIV/AIDS and how it spread. This is because of societal disposition which conspicuously reflect in planning and implementation of various programs targeted towards improving sexual health of blind and deaf students. This is obvious in

the depth of their knowledge of attitude to HIV/AIDS and inability to gird their sexual activities which has made the issue of the global epidemic to be difficult to control among students generally. Therefore, this research work is necessary at this particular period when there is groaning concern for reduction and elimination of HIV/AIDS among entire population of the world.

Research evidences (D'Aubin, 2003; World Bank & Yale University, 2004) showed that blind and deaf face significant disadvantages in most societies that they are not considered as a target group for HIV prevention education and AIDS outreach efforts due to a misconception that they are not sexually active and exposed to risk HIV infection but none of them specifically treat PWDs with the age group 12-16 years as this age group is believed to be found at puberty stage which is the time of uncertainty and a time where different patterns of boy-girl relationship develops and start of sexual initiation(sexual experimentation).

Statement of Hypotheses

In this study, four null hypotheses were generated and tested for significance at 0.05. These include:

1. There is no significance difference in the level of knowledge, attitude and behaviors of blind and deaf students toward HIV prevention.
2. There is no significant difference in the knowledge of HIV/AIDS prevention between blind and deaf students.
3. There is no significant difference in the attitude of the participants (blind and deaf students) to HIV/AIDS prevention.
4. There is no significant difference in the behavior of blind and deaf students about HIV/AIDS prevention.

1.3. Objective of the Study

1.3.1. General objective

The overall objective of this research is to explore the knowledge, attitudes and behaviors of blind and deaf students towards the Prevention of HIV/AIDS in some selected Government Primary Schools of Addis Abeba.

1.3.2. Specific objectives

- To assess the knowledge of deaf and blind students toward the prevention of HIV/AIDS in some selected Government Primary Schools of Addis Abeba.
- To assess the attitude of deaf and blind students toward the prevention of HIV/AIDS in some selected Government Primary Schools of Addis Abeba.
- To assess the behaviour of deaf and blind students toward the prevention of HIV/AIDS in some selected Government Primary Schools of Addis Abeba.
- To forward possible recommendations for the gaps identified for blind and deaf students in terms of level of knowledge, attitude and behaviors in the context of HIV prevention.

1.4. Purpose

This study sought an assessment of knowledge, attitude and sexual behavior of blind and deaf students on HIV/AIDS transmission and prevention at primary school of Addis Ababa City Administration. The current situation of students with disabilities places them not only at a high risk of HIV and AIDS, but also at a vulnerable position in the absence of adequate public support systems. Thus, there is a need of increasing awareness among students with disabilities.

1.5. Definition of Terms

Knowledge: A clear and certain awareness of something (in this context about HIV/AIDS preventive measures) (Webster, 1979)

Attitude: A tendency to evaluate a particular "Attitude Object" (in this context HIV/AIDS preventive measure) with some degree of favor or disfavor (Stroebe and Stroebe, 1996).

Behavior: The practical involvement of an individual in activities which do not expose him/her for HIV/AIDS infection (i.e. using preventive measures against the infection of HIV/AIDS).

1.6. Significance of the Study

A continuous evaluation of any program, including approaches of HIV/AIDS education, has a paramount importance. Accordingly, this study helps to see the knowledge, attitude and behavior about HIV/AIDS preventive measures among the blind and deaf students. The information

presented in this study, therefore, may help as a guide for pertinent bodies to design more conducive approaches of HIV/AIDS education for blind and deaf. This is in turn significant for the introduction of long-lasting HIV/AIDS awareness, development of proper attitude towards HIV/AIDS and avoiding risky behaviors of the deadly disease. In short, conducting such a research is a matter of life and death-it is helpful to save the life of blind and deaf students. Finally, the research may also serve as a springboard for interested researchers in this area.

1.7. Scope of the Study

The study is restricted to the blind and deaf students in the government primary schools of Addis Ababa City Administration. Specifically, to these students who were enrolled in the second cycle (Grades 5 -8) of the schools of 2008E.C. These grade levels' student are selected, for they are assumed to be found at puberty stage which is the time of uncertainty and a time where different patterns of boy-girl relationship develops. These pressures are greatly intensified for students with disability (Moores, 1996). And this might have an indication for these grade students to be involved in risky behaviors of HIV/AIDS infection.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

2.1. Introduction

According to Gulliford and Upton (1992), there is growing evidence that children with special needs are far more vulnerable to being abused, in any of its forms. Hallahan and Kaufman (1988), Werner (1995) specifically indicated that children with disability are more at risk for sexual abuse than are children without disability. This might be due to persons with disabilities are powerless to protect themselves from abuses of others. For instance, blind individuals never see their perpetrators or even know she/he is there until an assault occurs and deaf can't communicate the abuse that have encountered. Persons with disabilities for many reasons which appear to be unidentified are likely to exhibit greater incidence of sexualized behavior (Gulliford and Upton, 1992) than other person. Moreover, Werner (1994) identified that on the average, disabled children began to mature sexually a little earlier than the non- disabled children.

From the above clearly stated risk factors for HIV/AIDS infection, it seems safe to conclude that persons with disabilities are at a greater risk of HIV/AIDS infection. In line with this idea, Ethiopian Federation of Persons with Disabilities (EFPD) (2001:7**)** □□□□ □□□□□ □□□□□ □□□□ □□□□□ □□□ □□□ □□□□□□ □□□□□□□ □□□ □□□□ □□□. □□. □ □□□□□ □□□□ Which literally means that due to the sever situation that they live in, persons with disabilities are exposed for HIV infection more than any other segments of the society.

Therefore, in the following section the nature of HIV/AIDS and empirical studies on knowledge, attitude and behavior about HIV/AIDS preventive measures among the blind and deaf will be reviewed.

2.2. Understanding the truth about HIV / AIDS

AIDS results in progressive impairment of the human immune system and the consequent emergence of various opportunistic infections. HIV infection is the first stage of a depressing

process that leads to AIDS. After entering the human host, HIV attacks certain cells of the immune system and destroys them.

There are several modes of HIV transmission and the most common is through heterosexual and homosexual intercourse. Prenatal transmission from mother to child and transfusion of blood and blood products are also other modes of transmission. Intravenous drug use is a common source of HIV transmission in the developed world while injections and accidental needle stick injuries account for a small proportion of AIDS cases. In sub Saharan Africa the most common is through heterosexual intercourse. The risk of infection increases with the number of sexual partners. High rates of partner exchange, the practice of certain types of sexual intercourse and the presence of anal or genital lesions combine to increase the risk of HIV infection, (Akol et al, 2000).

Populations at risk of HIV infection and AIDS vary by geographical region. In North America, Western Europe and parts of South America homosexual males and IV drug users have the highest prevalence of AIDS. In Africa and most parts of the Caribbean the highest prevalence levels are found among heterosexual persons, especially those with numerous sexual partners (Palloni and Glicklich, 1989). Most of those infected are aged 20-49, the most sexually active group. Sexual behavior therefore plays an important role in the risk of infection.

Gradually, more and more countries around the world are starting to realize that they must take decisive action if they are to prevent a major AIDS crisis. Given the decline that has taken place in its HIV prevalence, Ethiopia is being given as an example of good planning and action that others should rival. But the results seen in Ethiopia do not have a simple method, and with so many lives and such large sums of money at stake, it is important to look carefully at what has been done there.

2.3. Knowledge of HIV/AIDS

Exploring the knowledge of the blind and deaf students about HIV/AIDS is serious as it helps to use HIV/AIDS preventive measures effectively and efficiently. From an implied point of view, the reality of knowledge gap about what HIV/AIDS is and how it could be transmitted. Lack of awareness could possibly create knowledge gaps to use preventive measure (i.e. abstinence,

consistence use of condom and to be faithful to one partner) in the population as a whole and PWDs in particular..

Duncan, Dancer, Highly, Detholyn and Gibson (1997), had plotted 5 state schools of the deaf to investigate their knowledge of AIDS. The 129 students in grades 9-12 had extremely limited core knowledge of AIDS, with the correct answer to only 8 of the 35 questionnaire items designed to measure their knowledge level. Also high school students, deaf college students' knowledge of HIV/AIDS had also been assessed by Doyle (1995). For his study, a review was sent to a sample of 500 deaf undergraduate students from Gallaudent University and the study stated that the sample students had relatively high levels of knowledge about HIV/AIDS though the researcher didn't explain it in quantitative terms, for instance, in percentage. From these two review reports of knowledge about HIV/AIDS, one could observe distinct differences about their knowledge. This difference in knowledge strength is credited to increase in the educational level. Other researchers had evaluated the knowledge level of deaf student by presenting a specific knowledge question about the disease. In this linking, the Florida HIV/AIDS Surveillance Data Office (2001) presented the question "What is AIDS?" for 279 deaf people. The result had represented 53.8% correct answer, 11.8% incorrect answer, 30.5% don't know and 3.9% missing. This shows almost half of the respondents had given a correct answer for this energetic knowledge question of the deadly disease. Furthermore, the office had asked another question, "What does HIV negative mean?" for deaf people and the results showed that I have the virus (31.1%), I don't know the virus (19.5%), I don't know (41.3%) and missing (8.2%). This implies that the vast majority of deaf people had misunderstood the diagnostic result of HIV/AIDS. Confirming these misconceptions American Psychologist Association (APA) (1998) stated that when you sign to deaf person that she/he is HIV positive, you may see her/him smile because many deaf people interpret the signed word "positive" as something which is good.

How HIV/AIDS is transmitted and how it is not transmitted is amongst the fundamental knowledge of HIV/AIDS. With reference to this point, Doreen, who is a deaf professional working with and for the deaf people related her experience of finding out that her sister- in - law had AIDS and in retrospect she realized that family member could be infected by her sister’s-in-law perspiration (Collins and Smalley, 1998). From an implied point of view, the existence of

knowledge gaps (i.e. what is HIV/AIDS and how could it be transmitted) could possibly create knowledge gaps to use preventive measures.

There is no statistical information about the actual number of HIV/AIDS infected blind individuals and to what extent they have reduced risky behaviors of HIV/AIDS infection. This is a very disturbing phenomenon, for these groups of individuals are ignored in the increasing spread of HIV/AIDS, which at the present the only feasible means to prevent oneself from being infected is through information (knowledge). As a matter of fact, blind students are deprived of their rights for HIV/AIDS education by different factors, which are odd only for these groups of individuals, (if not odd it may have more adverse effects on their knowledge level). Reviewing these factors is important partly because it helps to assess to what extent they affected the knowledge level of these individuals. The undergoing discussion, therefore, is concerned with these ends.

In Ethiopia situation societal attitudes towards persons with disabilities are generally negative regardless of their sex differences (Tirussaw, 1994; Tibebu, 1995). This negative attitude towards persons with disabilities in general and blind individuals in particular has an implication for how these persons are treated by other people since attitude are important factors that affect the way how people treat disabled individuals in every walk of life (Hannu, 2000). For instance, many parents (Scholl, 1986) consider educating a blind child is a waste of money since God has cursed them of giving a blind child. This includes the education of disabled individuals about HIV/AIDS. Hundred college age students were asked to complete a sentence regarding their attitudes about the sexuality of the disabled and 82% females and 82% males reported negative reaction about sexual intercourse between a disabled young woman and disabled man (Denney and Quadagno, 1992). This might be due to the society's prejudice about considering disabled individuals as if they were not people with sexual needs. In line with this Briggs (1995) explained that societies' believe that disabled people are asexual. Furthermore, Heward and Orlansky (1988) added that blind students are wrongly assumed that they are less interested in sex. However, the truth is stated by a disabled person himself as that they all are born sexual beings, everyone is a person first and some of them also happen to have disabilities (Denney and Quadagno, 1992). These prejudice coupled with our societies' attitude that discussing sexual

matters is taboo, may make blind students uncomfortable for seeking information about HIV/AIDS and they may grow up with serious knowledge gaps about the disease. Let alone to have knowledge of HIV/AIDS, the blind individuals have difficulty of knowing the anatomical structure of the opposite sex. For instance, in Heward and Orlansky (1988) a blind had told his counselor that he knows girls have breasts but he didn't know where they are.

The other issue, which could be cited as hindering for the education of HIV/AIDS for blind student, is the blind itself. Ysseldyk and Algozzin (1995), for instance, stated that limitation from visual observations, which is a primary method of learning, is absent for the blind child. They further stated that information acquired through incidental learning through observation is unavailable to many blind children. These authors ideas has an implication the blind individuals might have knowledge gaps and misconception about HIV/AIDS.

The other issue, which could also be cited as a barrier for acquiring information about HIV/AIDS, is the social interaction experience of the blind children, which is not equal with the sighted counter parts. Over-possessive, over-protective attitudes of parents of blind children may itself become as damaging as the blindness, for it can keep off from any hope of social interaction with their peers; both blind and fully sighted (Instand, 1995). Concerning the advantages of social interaction, Hendren (1990) stated that the achievement of satisfactory and satisfying sexual adjustment lies at the very center of the whole web of a good social relationship.

Blind individuals don't have the opportunity to mix with other children with unverified way, play games, jokes, stories, songs and private discussions and often miss out one of the most common forms of sex education (Scholl, 1986). This incomplete knowledge of sex education might suggest that they also might have knowledge gaps about HIV/AIDS, for sex education this day is recommended as a means to equip individual with HIV/AIDS. He also stated that stereotypic behaviors of blind individuals such as body rocking, head swaying and eye-rubbing (which are socially inappropriate) may delay with the children's ability to be receptive to learning and the children may also become increasingly withdraw from the reality. This idea of Scholl’s has implications for HIV/AIDS education for blind individuals and in turn might have reduced their

knowledge about the disease. And again this in turn might affect to use HIV/AIDS preventive measures.

2.4. Attitude towards HIV/AIDS Prevention

One of the most typical human characters is the capacity to be modified as a result of new learning and this capacity is the characteristic of all human beings throughout the entire life cycle (Feverstein, 1979 in Tirusaw, 2001). So to bring attitudinal change or behavioral change it seems that at the present a great deal of information about HIV/AIDS preventive measures have been bombarded to the public at large. There is also a research finding Hannu,(2000) which indicates that the knowledge is a major factor in the process of attitudinal change. A review made at the University of Western Cape (Kelly, 2001) interestingly witnessed the above finding in that two-thirds of the students surveyed had changed their behavior because of what they had learned about HIV/AIDS. These findings might enable us to suggest that two-thirds of the students had used HIV/AIDS preventive measures.

Research findings on knowledge about HIV/AIDS and attitudinal change (Using HIV/AIDS preventive measures) however, didn't lead to similar conclusions. Among young Zimbabwean males (Kelly, 2001) greater knowledge about HIV/AIDS was often associated with unsafe sexual practices. Simkins and Herndrick (1987) also indicated the university students at Missour; came up with high level of knowledge about HIV/AIDS but there has been little change in using HIV/AIDS preventive measures.

Beyene et.al (1997) concluded that students' attitude towards HIV/AIDS and their protective behavior didn't match with the relatively high level of knowledge they have. Moreover, Ashebir (1995) indicated that the change in attitude due to advent of AIDS is very minimal revealing that the message based AIDS education used so far is not sufficient to bring behavioral change. By and large, these studies (i.e. studies abroad and in our locality) may indicate us how the problem of using preventive measures of HIV/AIDS infection has gone deeper than ignorance. Hadn't it be a bit paradox to expect an attitudinal change (i.e. abstinence from sexual intercourse, consistence use of condoms, or being faithful to one life time partner) from individual who have minimal knowledge (for instance hearing impaired individuals) and from individual whose

knowledge levels is not clearly known except the factors which affect the knowledge of HIV/AIDS (for instance the blind) about HIV/AIDS preventive measures? Anyhow, it will be what we see at the end of this study.

2.5. Behaviors towards HIV/AIDS Prevention

The education of HIV/AIDS, among other things, involves to increase awareness about risk factors of HIV/AIDS infection and to motivate individuals to engage in risk- free behavior. There are uncertain blocks, however, to achieve this end to deaf individuals. Firstly, deaf is best described as a communication disability. Because they either use (Briggs, 1995) different communication system or have inferior communication skills. This has implications to educate and enable them take the necessary protections about risk factors of HIV/AIDS infection. Secondly, physical handicap of any kind directly affects all aspects of the self (Hendren, 1995). And there is strong evidence that healthy sexuality depends on healthy self-image (Scholl, 1986). Thirdly, deaf children are vulnerable to child abuse (Briggs, 1995). Fourthly, disabled children have difficulty of understanding health problem (Gulliford and Upton, 1992). These all might have indications to be uncertain blocks for efforts to avoid risk factors of HIV/AIDS infection.

It seems to examine the extent to which the above uncertain blocks affect the education of avoiding risky factors that different researchers initiated to measure the perceived risk of HIV/AIDS in the deaf population. Doyle (1995) for instance, risks that those in the deaf population may place themselves at a greater risk for AIDS. However, the higher level of AIDS knowledge, among the samples of his study didn't correlate with less risky behavior. On the contrary Zazove, Niemann and Gorenflo (1993) indicated that better health related behavior i.e. less risky behaviors of HIV/AIDS infection such as low use of tobacco, drug, alcohol, and so on use and men sex with men (MSM) Correlate with high knowledge of HIV/AIDS.

On the other hand, the Florida HIV/AIDS Surveillance Office Data (2001) had asked 279 deaf students to determine the prevalence rate of sexual risky behavior of HIV/AIDS infection and the report showed oral sex (45.5%), vaginal sex (63.8%) and anal sex (30.5%). The report also asked the number of partners in the last 6 months and their response revealed the following pattern. That is, nobody (29.4%); 1-3 persons (43%); 4-6 persons (12.5%), More than 6 persons (6.5%)

and missing (8.6%). Finally, the surveillance office commented that the deaf is infected by HIV/AIDS not because of their disabilities but because of the risky behaviors they may engage in. From the literature reviewed under the prevalence of risky factors of HIV/AIDS infection among deaf individuals, it is possible to generalize that whether they are engaged in risky or risk-free behavior of HIV/AIDS infection, there is no consensus on the literature. And these all risky behavior means the deaf individuals didn't modify their behavior to use HIV/AIDS preventive measures effectively and efficiently.

Risk factors are activities that increase the likelihood of HIV/AIDS infection. There are no definite statistics which show the percentage distribution of risk factors (as that of the deaf) in the blind population. This clearly indicates that an important problem has been over looked for a long period of time in the country. Risky behaviors of HIV/AIDS infection are largely pronounced in the disabled population in general and in the blind individuals in particular. Thus it undoubtedly will compound the infection rate of the blind persons more than the general population.

It is a common knowledge that the period of adolescence is a difficult time for both young people themselves and their parents. Disability will aggravate these difficulties and this is certainly true for young blind people (Varma, 1996). He further stated that the greater vulnerability of the handicapped as a group to emotional disturbance makes many of them more unstable during adolescence than the non-disabled population. This clearly implies blind students are at greater risk of HIV/AIDS infection at the period of adolescence more than the normal population.

To keep blind individuals from involving risk factors of HIV/AIDS infection, we have to give them the confidence to reject sexual misbehaviors, which exposes them for HIV/AIDS infection. Developing this self-confidence (Briggs, 1995) is the root of all confidence building and self-protection. Further they stated, however, that for blind persons the self- concept implies magical tendencies of power and capability and since he/she has loss the "wholeness" of his/her person by acquiring a disability. She/he, therefore, in her/his own mind may be less of a person. Reduced self-concept directly effects on individuals assertiveness (Solomon, 1995). According to him persons with low self-concept fails to say "no" when one is pressured to do something,

which he doesn’t want to. That means when blind individuals are requested and/or forced to have sex, without condom or any protective means of HIV/AIDS infection, they couldn't persuade or refuse to the initiative.

There is evidence that the rate of sexual abuse committed against disabled people is far higher than that suffered by the wider community. In line with this, The World Disability Report (1999) stated that disabled individuals experience sexual abuse and they are much more at risk than the general population for HIV/AIDS infection and the report further explained that most are sexually abused in a cycle of violence from which they cannot escape. For the sexual abuse of blind individuals, the report gave such reasons as they are more dependent on others for assistance and are unable to differentiate between appropriate and inappropriate physical contacts.

CHAPTER THREE

Research Method

This chapter discusses the methods used in the collection and analysis of data. It presents and explains the methodological approach of the study, methods of data collection technique and ethical considerations of the study were presented.

3.1. Research Design

Survey research design was adopted in this study. With this design, systematic inquiry on HIV/AIDS Education related knowledge, attitude and decision making of blind and deaf students was conducted without manipulation of the variables. Descriptive survey method helps to obtain information concerning the current status of the population/ phenomena and to describe "what exists" with respect to variables in a situation and also concerned with the assessment of opinions, demographics, preferences, practice and procedure (Akol et al, 2000).Furthermore, descriptive research designs help provide answers to the questions of who, what, when, where, and how associated with a particular research problem.

3.2. Target population and sampling

Akol et al, 2000 describe a target population as 'the total number of persons, events, Organization units, case records or other sampling units with which the research problem is concerned'. Thus the study was conducted in Addis Abeba City Administration. The city has ten sub-cities and one hundred sixteen Weredas (Adis Abeba City Administration Education Abstract, 2008E.C). The first step was to find out the total number of government primary schools, which are found in Addis Ababa City, and to identify the total number of blind and deaf students who are enrolled in their respective schools. Based on the abstract, the researcher found that blind and deaf students are not enrolled in all the schools of the City Administration. Three sub- cities and government schools with the high number of enrollment (Alfa Mesmat Yetesanachew in Bole sub-city, Yekatit 23 Leyu Felagot in Addis Ketema sub-city and Dagmawi Minilik in Arada sub-city) were selected by using purposive sampling technique. The total numbers of students enrolled in

these sample schools with blind were 40 and deaf were 137. (Participants were individuals who enrolled in second cycle (grade 5-8, 2008 E.C.).

The deaf students were stratified according to their sex. And from a total of 137 students, 44 (21M & 23 F) (32%) students were selected by random sampling technique. Here, male and female subjects from each stratum were taken proportionally. While all of the 40 (27 M & 13 F) blind students were selected by purposive sampling technique. Out of this number 48 (57.14%) were males while 36 (42.86%) were females. The participants were believed to have been exposed to HIV/AIDS Education for some period of time by their own schools.

3.3. Data collection Instrument

The questionnaire used for this study was a self designed HIA/AIDS education inventory. The items in the questionnaire were based on the research objectives and reviewed literature. The questionnaire was designed to capture all the relevant information regarding the proposed research topic. The respondents, therefore, were indicated their response on a likert type scale (strongly agree to strongly disagree). The instrument was divided into four sub-sections

- The respondent's background information
- Knowledge about HIV/AIDS and its preventive measures.
- Attitude towards HIV/AIDS and its preventive measures.
- Precautions taken by respondents not to be involved with high-risky behaviors of HIV/AIDS infection.

The questionnaire was administered to the deaf respondents by hearing persons who are fluent in sign language. These methods of administering the questionnaire for one thing help to establish rapport easily with respondents and for the other thing when respondents face any difficulty, especially comprehension difficulty (if any) the administrators are capable enough to search for and give immediate solutions. For the blind respondents, however, the questionnaire was presented by reading since they couldn't read printed materials.

To these ends, a total of ten research assistants (5 for blind and 5 for deaf respondents) were selected by establishing a minimum criteria of fluency in sign language for deaf respondents and distinct reading ability for blind respondents. Training of the research assistants, therefore, was

given for three days through lectures, discussions and demonstrations by the principal investigator. Since the study inquires about the respondents' private life, they might be reluctant to give complete answers and this anticipated problem was solved by informing confidentiality of their response.

3.4. Methods of Data Analysis

The questionnaire contains 31 items (10for knowledge, 18for attitude and 13for behavior) measuring blind and deaf students exposure to HIV/AIDS transmission and prevention education in schools. The items were scored on a 5-point Likert scale (1 = strongly disagree/never; 5 = strongly agree/everyday). The scores on the 31 items were then added together to create the total scores of knowledge, attitude and behavior, with a higher score indicating a more literacy-rich. To analyze the significant differences among blind and deaf students knowledge, attitude and behavior about HIV/AIDS preventive measures. Percentage and independent sample t-test statistical methods were employed for the analysis of data collected from the instruments used. The analyses tested the significant differences among the variables. The results of these analyses were used to test the three hypotheses generated in this study.

3.5. Ethical Consideration

Researcher was conducting the research by taking all ethical issues into considerations. First, before gathering data from different sources, the researcher was introduce the purpose of the study and was reach into an agreement with all the participants. Regarding the consent, the researcher informs them that they can withdraw from the research at any time and in any circumstance if they do not feel comfortable. And all the information was gathered based on consent of the participants.

3.6. Pilot Study

A Pilot study, the purpose of which is to check the appropriateness, understandability, acceptability (by ascertaining politeness of words and phrases since most items deal with the respondents' private life) of the items and to evaluate the completeness and proper recording of

responses of each respondent (since the blind and deaf respondents might have difficulties) was conducted. To conduct the study more objectively, the following procedures were followed:

- The English questionnaire was translated into simple Amharic and back translated into English.
- The instruments were pretested for content validity and reliability using 20 students in Del Betegel primary School, 10 blind (5 females and 5 males) and 10 deaf (6 females and 4 males) respondents were selected by purposive sampling technique respectively, in a pilot study. These respondents were later excluded
- The respondents and the information were not included in the main study or the final data analysis and results
- Questionnaire inter-judge reliability was computed and the alpha reliability estimate was about 0.830, which is considered to be satisfactory. Similarly, the kuder Richardson (KR21) coefficients of reliability of the instruments were 0.543 for knowledge, 0.547 for attitude and 0.676 for behavior.

CHAPTER FOUR

Data Analysis and presentation

Null Hypothesis One

There is no significance difference in the level of knowledge, attitude and behaviors of blind and deaf students toward HIV prevention

The following operational definitions were used: knowledge was defined as the level of information and understanding difference about the mode of transmission, sign and symptoms and way of prevention as well as control of STIs. They were categorized as high (scored above the median) and low (scored below the median). Students were considered as having a good knowledge if they scored above the median of the knowledge question and Poor knowledge if they scored below the median of the knowledge question. Attitude is defined in this study as respondents' perception towards STI both favorable and unfavorable or the value of students to ward STI. Favorable attitude was defined as those respondents who respond attitude question scored above the median and unfavorable attitude was that respondent who responds attitude question scored below the median. Behavior was defined as experience of respondents toward risky sexual behavior leading to STI and its prevention method. Practiced were those who scored above the median for behavior related question and not practiced were those who scored below the median for behavior related question. STIs are groups of diseases, which are mainly transmitted by sexual contact.

Table 1: The level of knowledge, attitude and behavior score of blind and deaf students about HIV/AIDS prevention.

		Score				
knowledge		Correct knowledge		Incorrect knowledge		Total
		No	%	No	%	
	Blind	24	60	16	40	40
	deaf	18	40.91	26	59.9	44
Attitude		Favorable attitude		unfavorable attitude		Total
	Blind	26	65	14	35	40
	deaf	21	47.73	23	52.27	44
Behavior		Favorable behavior		Unfavorable behavior		Total
	Blind	24	60	16	40	40
	deaf	20	45.45	24	54.55	44

As indicated in the above table, nearly half (60%) and below half (40%) of the blind student had correct and incorrect knowledge about HIV/AIDS preventive measures respectively. When we closely examine their attitude below half and above half of the respondents had unfavorable (35%) and favorable attitude (65%) about the preventive measures. 40% of the blind student had Unfavorable behavior (didn't take any precautions not to be infected by HIV/ AIDS), but only 60 percent.

For the deaf student, the table depicts that 40.91% had correct knowledge and 59.9% incorrect knowledge; 52.27% had unfavorable attitude and 47.73% favorable attitude and 45.45% had favorable behavior and 54.55% had Unfavorable behavior (didn't have practice of any of HIV/AIDS) preventive measure.

Null Hypothesis Two

The null hypothesis two states that there is no significant difference in the knowledge about HIV/AIDS prevention between blind and deaf students. The results of hypothesis two is presented on Table 2.

Table 2: *T*-test Comparison of knowledge towards HIV/AIDS prevention among blind and deaf students.

Variables	N	X	SD	df	t	P	Remark
Blind	**40**	**34.08**	**7.64**	**82**	**0.53**	**0.60**	
Deaf	**44**	**33.20**	**7.44**				

We see that we have a *t* obtained of **0.53** and, with 82 degrees of freedom (*df* = n-2), it is significant at the 0.6 level. Thus, we can conclude that blind and deaf students are no significantly different with respect to knowledge score. More specifically, by examining the group means and the mean difference (Group 1 mean - Group 2 mean) we can see that blind student knowledge score an average of 0.87045 less time than did the deaf student.

Null Hypothesis Three

The null hypothesis three states that there is no significant difference in the attitude of the participants to HIV/AIDS prevention. The results of hypothesis two are presented on Table 3.

Table 3: *t*-test Comparison of Attitude towards HIV/AIDS among the Participants

Variables	N	X	SD	df	t	P	Remark
Blind	**40**	**58.1**	**7.27**	**82**	**2.965**	**0.004**	
Deaf	**44**	**53.41**	**7.22**				

The result of the table above indicated that we have a *t* obtained of **2.965** and, with 82 degrees of freedom (*df* = n-2), it is significant at the 0.004 level. Thus, we can conclude that blind and deaf students are significantly different with respect to attitude score. More specifically, by examining the group means and the mean difference (Group 1 mean - Group 2 mean) we can see that blind student attitude score an average of 4.69091 less time than did the deaf student.

Null Hypothesis Four

The null hypothesis four states that there is no significant difference in behaviors about HIV/AIDS prevention among blind and deaf students. The results of hypothesis four are presented on Table 4.

Table 4: T-test Comparison of behaviors about HIV/AIDS prevention among the Participants

Variables	N	X	SD	df	t	P	Remark
Blind	40	33.475	5.71093	82	1.001	0.32	
Deaf	44	31.9773	7.73542				

The result of the table above indicated that we have a *t* obtained of **1.001** and, with 82 degrees of freedom (*df* = n-2), it is significant at the 0.32 level. Thus, we can conclude that blind and deaf students are no significantly different with respect to behavior score. More specifically, by examining the group means and the mean difference (Group 1 mean - Group 2 mean) we can see that blind student's behavior score an average of 1.49773 less time than did the deaf student.

CHAPTER –FIVE

Discussion

5.1. The Blind and Deaf Students' Knowledge, Attitude and Behavior of HIV/AIDS Preventive Measures.

As Table 4 shows nearly above half of the blind student and below half the deaf student respondents (60% and 40.91% respectively) had correct knowledge about the preventive measures of HIV/AIDS infection.

However, respondents' responses for the question "People can protect themselves from the HIV virus by abstaining from sexual intercourse" No disparity was observed between the blind and deaf students. The deaf respondents replied; they should agree (54.55%) and the rest (45.45%) gave disagree. The response given for the very same question by the blind student was a bit encouraging in that they replied that agree (62.5%) and the rest (37.5) gave disagree

.

The other alternative explanation might be the respondents' response for the question "People can protect themselves from the HIV virus by having one uninfected faithful sex partner" This is because the respondents have had misunderstanding as to how HIV/AIDS could and couldn't be transmitted. Then 77.5% of blind student and 54.55% of deaf student respond correct answer. Therefore, these misunderstandings might have contributed for the presence of knowledge gaps for HIV/AIDS preventive measures since clear vision of transmission modes of HIV/AIDS directly related with the application of HIV/AIDS preventive measures.

According to Hannu (2000), knowledge is a major factor in the process of attitudinal change. It might be due to this idea that there was no as such a great difference between the percentage distribution of the respondents' knowledge and attitude about the preventive measures of HIV/AIDS (see Table 1). As this table shows, their attitude about the preventive measures deaf student respondents have had 47.73% favorable and 52.27% unfavorable attitude about the preventive measures respectively. For the blind student respondents this proportion was 65% for

favorable attitude and 35% for unfavorable attitude about the preventive measures of HIV/AIDS. A close examination of the table further shows while the blind student respondents correct knowledge about the preventive measures was above average (above 50% percent), these favorable attitude of the preventive measures was also above average (above 50%). Whereas the deaf student respondents correct knowledge about the preventive measures was below average (below 50% percent), there favorable attitude of the preventive measures was also below average (below 50%).

Regarding the respondents' behavior about the preventing measures Table (1) show that an interesting and encouraging result. This is because 47.73% of the deaf student and 65% of blind student had practiced preventive measures not to be infected by the deadly disease- HIV/AIDS. The rest of the respondents were at risk of HIV/AIDS infection.

Condom use is among the preventive measures (see the part of definition of terms) and respondents were asked whether their impairment has an effect in their intentions of using condoms or not. In this connection the question "how much effect do you think your visual impairment or hearing impairment has on your intentions of using condoms?" was presented to both groups of respondents. The blind student replied very high (17.5%), high (15%), low (7.5%), very low (22.5 %) and not at all (37.5%). On the other hand, the deaf student replied very high (15.91%), high (13.64%), low (11.36%), very low (25 %) and not at all (34.1%).

As it is explicitly stated earlier, the majority of respondents didn't practice preventive measures in general and condom use in particular. This might be due to their impairment, (especially the deaf respondents) to protect themselves from HIV/AIDS infection.

5.2. The analyses of the three hypotheses

The analyses of the three hypotheses "there is no a significant difference in knowledge, attitude and behavior between the visually impaired and the hearing impaired about HIV/AIDS preventive measure?". To give an answer for this research question Independent T- Test was employed and the analysis shows the visually impaired and the hearing impaired students don't differ significantly in their knowledge and behavior they have towards HIV/AIDS preventive

measures. However, these groups of individuals differ significantly in their attitude they exhibited about HIV/AIDS preventive measures (see table 3).

The finding of this study revealed that HIV/AIDS Education have proved significantly effective in changing sexual behavior of students with hearing impairment and visual impairment. These results contradict various findings that reported low knowledge and poor decision-making pattern HIV/AIDS among students, especially students with hearing impairment and visual impairment. According to the findings of this study, HIV/AIDS Education has significantly increased awareness, improved knowledge of and changed risky sexual behavior that can lead to infection of HIV/AIDS. The findings corroborated Mukkhopadhya and Abosi (2004) who found awareness and knowledge about HIV/AIDS to be very high among students with and without hearing impairment in Botswana. It was also supported by Doyle (1995) that found relatively high general knowledge about AIDS among eighty four college students. Gesinde (2008) in a related study found that the degree of awareness and knowledge about HIV/AIDS among one hundred and three randomly selected deaf students of Federal College of Education (Special), Oyo was generally moderate.

In addition, the finding of this study lend support to the outcome of research carried out on involving the church in the provision of Christian Family Life Education by Jonathan-Ibeagha, Adedimeji, Okpala and Ibeagha (1999). Christian Family Life Education was considered to be significantly helpful in that it involves the teaching of spiritual and social skills that will help adolescents to cope with life challenges. This was evident in the dispositions of the selected adolescents trained to be trainers of their peers in eight local government areas in Oyo State.

Furthermore, student with visual impairment recorded higher mean scores than their deaf student counterpart. The implication is that student with blind responded more positively to information about HIV/AIDS Education. This corroborated research by Okubanjo (2001) who found significant difference between blind and deaf students' awareness scores. They attributed this to the fact that blind student bothers less about the consequences of risk sexual behavior.

Though there is no empirical research finding (to the researcher's knowledge) which could either confirms or refute with this research, its result indicates the absence of significant difference in knowledge and behavior between the blind and deaf student except in attitude. The possible explanation for this difference of attitudinal change about preventive measures between the blind and deaf student might be attributed to the channel in which the information about preventive measures is presented.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1. Summary

The overall objective of the study was to examine the knowledge, attitude and behavior of the blind and deaf students about HIV/AIDS preventive measures. Accordingly, four null hypotheses were generated and tested for significance at 0.05. These include:

1. There is no significance difference in the level of knowledge, attitude and behaviors of blind and deaf students toward HIV prevention.
2. There is no significant difference in the knowledge score about HIV/AIDS prevention between blind and deaf students.
3. There is significant difference in the attitude score of the participants (blind and deaf students) to HIV/AIDS prevention.
4. There is no significant difference in behavior score of blind and deaf students about HIV/AIDS prevention.

In order to give an answer for these questions and to accomplish the objective of the study, 40 blind students (27 male and 13 female) were selected by purposive sampling technique and 44 deaf students (21 male and 23 female) were selected on random basis from the schools in Region 14 Administration. From these respondents information was gathered through a questionnaire which was administered through reading (i.e. by the form of interview check-list) to the blind student's respondents and self-administered questionnaire to the deaf student's respondents. Finally, the data was examined through different statistical techniques and the following results were obtained.

- Nearly half proportions of the blind (60%) and below half of deaf (40%) have had correct knowledge about HIV/AIDS preventive measures.
- As far as blind respondents' attitude and behavior is concerned, 65% of them had had favorable attitude, 35% unfavorable attitude about the preventive measures. And 40%

didn't take any precautions not to be infected by HIV/AIDS except 60 percent of the hearing impaired respondents.

- Among the deaf respondents, 47.73% had favorable attitude, 52.27% unfavorable attitude about HIV/AIDS preventive measures. Besides, 45.45% had a practice and 54.55% didn't have practice of these preventive measures.
- There is no significant difference in the level of knowledge of HIV/AIDS among blind and deaf students.
- There is significant difference in the attitude between blind and deaf students to HIV/AIDS prevention.
- There is no significant difference in the behaviors of HIV/AIDS prevention among blind and deaf students.

6.2. Conclusion

Having reservations in mind to draw firm conclusion since the issue of HIV/AIDS is related to the personal sexual habits that may be at risk to the social desirability bias and lack of adequate literature review the research has drawn the following conclusions from the results of the study.
The blind students have an above average correct knowledge, above average favorable attitude and above average right behavior about HIV/AIDS preventive measures. On the other hand deaf students have below average correct knowledge, below average favorable attitude and below average right behavior about HIV/AIDS preventive measures. This means that the distributed accurate information on how to protect oneself from HIV/AIDS is not fully available to the deaf students and these students didn't practice health promoting behavior or HIV/AIDS protective meanness (since those who practice protective meanness of HIV/AIDS is insignificant).

The study revealed that there is no statistically significant difference in knowledge and behavior score towards HIV/AIDS preventive measures between the groups of blind and deaf students, except in their attitude. The blind students have better attitude than the deaf students. This indicates that presenting information more on the aural channels had more power to display a behavioral pattern which enables the persons not to be involved into risk factors of HIV/AIDS infection than presenting information through visual channel.

6.3. Recommendations

It is obvious that HIV/AIDS Education can promote behavioral change among students especially blind and deaf students to the issue of sexual risk behavior which is widely believed to be the floodgate to the spread of HIV/AIDS. However, unskillful implementation of the program may spoil the unequal benefits the generation of youths and society at large may derive from it. Hence, it is recommended that:

- Government should be more involved in programs aimed at improving the health status of the society by allocating more funds for it.
- There should also be monitoring of the program and taking of appropriate action on any report submitted on weakness and progress of the program.
- Teachers in conventional and specialized schools should be retrained in order to furnish them with new ideas and strategies to convey all aspects of sexuality education to blind and deaf students.
- Specialists in special education should be encouraged to evolve signs that will represent some technical words used in the HIV/AIDS education program as this will bridge the gap of communication and information among the deaf students.
- Parents and guardians should partner with appropriate authority to see that programs on HIV/AIDS are attended to by all stakeholders using HIV/AIDS Education blueprints.
- MoE should design appropriate strategy and intervention package toward HIV/AIDS prevention for such disadvantage population

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APENDIX I

ADDIS ABABA UNIVERSITY

Department of Special Needs Education

Introduction: This questionnaire is prepared to collect information on HIV/AIDS knowledge, attitude and practice among blind and deaf students for /research purpose/. Some questions of the questionnaire ask very personal questions that some people find difficult to answer. However, your honest and genuine answers to these questions will have a great value to the research outcome. Your answers are completely confidential. Your name will not be written and will never be used in connection with any of the information you provide. I would greatly appreciate your help in responding to this questionnaire.

PART ONE: BACKGROUND INFORMATION

INSTRUCTION I: Please Fill Your Answer In The black space or encircle the number of your Choice For The Questions Given Below

1. Age : 1. 11-13 2. 14-16 3. 17 and above
2. Sex : 1. Male 2. Female
3. Tayps of disability: 1. Blind 2. Deaf
4. Religion : 1. Orthodox 2. Catholic 3.Protestant 4.Islam 5. Other, Please Specify .....
5. Educational level of your parents:
   - 5.1. Father's Educational level:
     1. Illiterate 2. Literate 3. Elementary School 4. High School 5. College and above
   - 5.2. Mother's Educational level:
     1. Illiterate 2. Literate 3. Elementary School 4. High School 5. College and above

PART TWO: KNOWLEDGE ABOUT HIV/AIDS PREVENTIVE MEASURES

INSTRUCTION II: Choose that you think is the best for you from the given knowledge scale alternatives for the questions given below. (1=strongly disagree,2=Disagree, 3= undecided, 4 = agree and 5= strongly agree)

No	Question	Answer				
		1	2	3	4	5
1	HIV/AIDS is God's Punishment					
2	HIV/AIDS has a negative effect on a particular individual, family and nation					
3	Person with disability are more vulnerable to HIV/AIDS than person without disability.					
4	People can protect themselves from the HIV virus by abstaining from sexual intercourse.					
5	Having sex with different persons possibly expose one for HIV/AIDS.					
6	People can protect themselves from the HIV virus by having one uninfected faithful sex partner.					
7	Unprotected sexual intercourse possibly causeHIV/AIDS.					
8	condoms necessary to have sex only with prostitutes					
9	People can protect themselves from the HIV virus by using condoms in sexual intercourse.					
10	The sero status of any individual is only known by having HIV test					

PART THREE: ATTITUDE TOWARDS HIV/AIDS PREVENTIVE MEASURES.

INSTRUCTION III: Choose that you think is the best for you from the given attitude scale alternatives for the questions given below. (1=strongly disagree,2=Disagree, 3= undecided, 4 = agree and 5= strongly agree)

No	Question	Answer				
		1	2	3	4	**5**
1	HIV/AIDS is God's Punishment; only praying can stop it.					
2	Visually impaired individuals are exposed for HIV/AIDS since they loss their sight that could enable them to identify HIV/AIDS infected individuals (For visually impaired respondents only).					
3	Hearing impaired Individuals are exposed for HIV/AIDS since they couldn't hear disseminated information about HIV/AIDS preventive measures (For hearing impaired respondents only).					
4	Person with disability are more vulnerable to HIV/AIDS than person without disability.					
5	Persons who look healthy might be infected with HIV/AIDS.					
6	It is possible to be abstained from sex until one gets married.					
7	If one doesn't have the experience of sexual inter course, It means that he/she is free from HIV/AIDS.					
8	It is comfortable to have casual sex with different persons.					
9	Having different sexual partners is an indication of modernization.					
10	It is all right to have sex with a person who is not a steady boy/girlfriend.					
11	It is advisable to being faithful to only one healthy partner due to HIV/AIDS.					
12	Condoms in their bags are prostitutes.					
13	Using condom reduces the gratification that one gets from sexual intercourse.					
14	The condom fluid itself contains HIV.					
15	It is embarrassing to negotiate for condom use with a partner.					

16	One shouldn't use condom due to religious values.					
17	Although one is extremely a roused sexually, he/she should still insist on to use condom.					
18	Everyone should feel comfortable to give blood for HIV/AIDS testing before marriage.					

PART FOUR: BEHAVIOR TOWARDS HIV/AIDS PREVENTIVE MEASURES

INSTRUCTION IV: Choose that you think is the best for you from the given alternatives for the questions given below

1. How often does the thought of infected by HIV/AIDS intrude in to your mind?

   1. Never 2. Sometimes 3. Most of the times 4.every time

2. Since you read and/or hear about HIV/AIDS, how often change do you think occurred in your Behavior that helps to avoid contracting HIV/AIDS?

   1. Very Low 2. Low 3.High 4. Very high

3 How often do you use alcohol, illicit drugs and smoke cigarettes?

   1. Never 2. Sometimes 3. Most of the times 4.every time

4. How often do you engage in to casual sex simply encouraged by peers or elicit drags?

   1. Never 2. Sometimes 3. Most of the times 4.every time

5. How much do you believe that whether to be infected by HIV/AIDS or not is within the control of yourself?

   1. Very Low 2. Low 3.High 4. Very high

6. How often you try to control yourself to be abstained from sex until marriage?

   1. Very Low 2. Low 3.High 4. Very high

7. How often have you been forced to have sex against your will?

   1. Never 2. Sometimes 3. Most of the times 4.every time

8. How often have you experienced sex win different partners?

   1. Never 2. Sometimes 3. Most of the times 4.every time

9. How often you control yourselfto be faithful to only a single partners?

   1. Very Low 2. Low 3.High 4. Very high

10.You know how to use a male condom appropriately.

1. Strongly disagree 2. Disagree 3. Agree 3. Strongly agree

11. How often your disability exerted on your intentions of using condom? (For visually impaired respondents only)

1. Very Low 2. Low 3.High 4. Very high

12. How often do you respect your partners (If you have any) demand for using condom?

1. Never 2. Sometimes 3. Most of the times 4.every time

13. How often do you put condoms in your pocket?

1. Never 2. Sometimes 3. Most of the times 4.every time

APENDIX II

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